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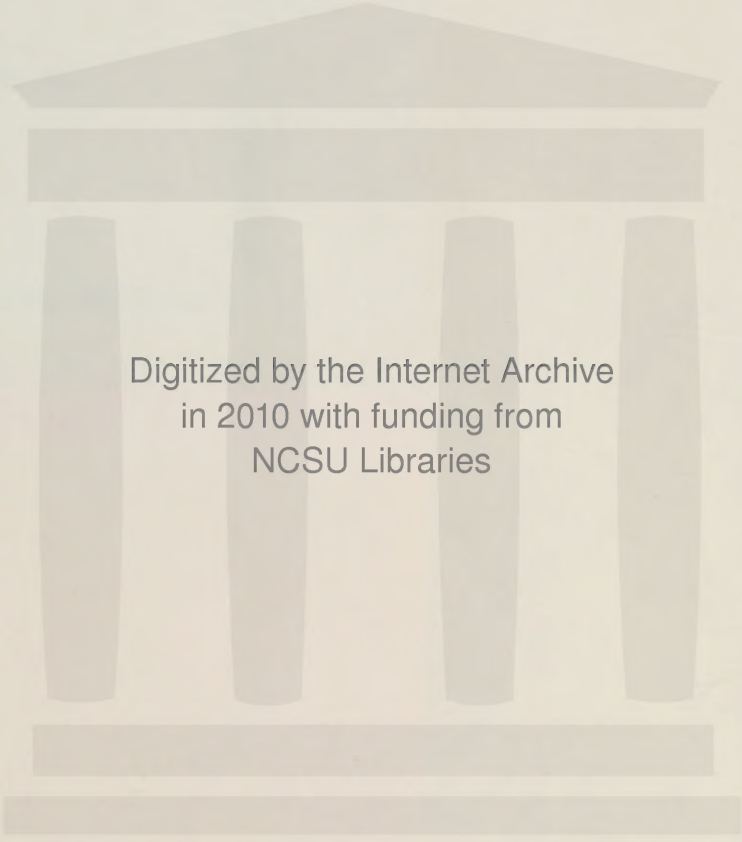
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THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.*

Tillage and Pasturage are the two breasts of the State. *Sully.*

C. T. BOTTS, Editor. No. 3, Governor Street.

VOL. I. RICHMOND, JANUARY, 1841. No. 1.

PROSPECTUS

OF

THE SOUTHERN PLANTER.

The Subscriber proposes to publish, in this City, a monthly periodical, to be called THE SOUTHERN PLANTER. It will be devoted, exclusively, to the promotion of Agriculture, Horticulture, and the Household Arts.

Rejecting long, and even perhaps able essays, he designs to make his paper the medium for the promulgation, in a condensed form, of the observations and deductions of practical men. In this way it is hoped, that the Planter of the South may be enabled to obtain the benefit of his neighbor's experience with little labor and less cost. A very able paper, upon the plan proposed, published in our sister State of New York, has been eminently successful, and productive of great good to the cause of Agriculture. Why should not our own State, more peculiarly Agricultural, be inspirited by so excellent an example?

Proposing to extract from that and other works, both foreign and domestic, all valuable information of a *general* character, the subscriber hopes to add to it valuable communications, more peculiarly applicable to our Southern soil, climate and institutions; enriching the whole with neat cuts, where the opportunity offers, or the subject demands it.

Of his ability to conduct such a work, it would neither avail nor become him to speak. In this, as in other cases of a similar kind, his patrons must be content to risk one year's subscription to enable them to judge. He will only assure them, that he has secured the promised assistance and zealous co-operation of some of the most able and practical Farmers in our State.

C. T. BOTTS.

TO THE READER.

With this number commences our editorial caree[r]; and in this number, it is proper, perhaps, that [we] should lay before the reader a more exten[sive] view of our design, than the limits of a pr[ospectus] could afford. Perhaps it will be [asked], what need of another agricultural paper? [Have] we not already enough to supply the wants [of] the community? Does the editor propose to amend, or improve upon plans already adopted or to furnish us with information unattainable heretofore?

The editor makes very few pretensions of any sort. He only proposes to introduce into his native state a plan, much used and highly approved to the north; that of publishing an agricultural paper at so small a price, as to bring it within the reach of all. The advantages of such a work over a more elaborate, and consequently more expensive rival, are manifold. Its very cheapness secures it an extensive circulation, of itself extremely conducive to the interest and well-being of a paper, since in a work of this kind, which relies chiefly upon extraneous assistance, the greater the circulation, the greater will be the amount of information elicited. Thus too, by throwing the paper into the hands of plain, economical men, who are frequently deterred from subscribing to a more expensive work, valuable facts may be obtained, which would otherwise be lost to the world. Its brevity and rareness render it probable that much pains will be taken to condense and elucidate information, points most desirable to the general reader. The truth is, that facts and experiments in agriculture are so slowly evolved, that in our opinion, such a paper as we propose, affords ample field in which to introduce them to the reader. Let us not be misunderstood; we certainly do not advise any individual to discontinue his subscription to a more expensive work, in order to take our little sheet. The aim and object of the two are probably entirely different; for whilst the philosophical and theoretical essays, which constitute their chief adornment, are frequently extremely valuable, they are entirely without the sphere of our more humble production.

Whilst nature has made the people of the south peculiarly agricultural, and whilst we are the great producers of America, the fact is undeniable, that, in economy and management, we are in many respects inferior to our northern brethren. Nor is it to be wondered at, for "necessity is the mother of invention;" and if the frigid climate, and unyielding soil of the north, compel them to arts, in themselves highly advantageous, why should not we, the children of a more indulgent parent, avail ourselves of the fruits of their labor? The truth is, that an extreme indulgence of nature has blunted our per-

cep ions, and like other spoilt children, we are upon the whole, hardly benefited by the indulgence.

To collect, examine, select from, and report to his readers in a clear, simple, and condensed style, all the information, to which, by the most untiring exertion, he can gain access, will be the aim and object of the editor: and so far as the most extraordinary and zealous devotion to the cause in which he is embarked, may entitle him to hope for success, so far he has a right to expect it.

But after all, his main reliance must be upon the friends of agriculture. His own unassisted exertions, no matter how strenuous, must be of little worth. Let the hundreds who have already manifested such an extraordinary interest in the success of this work, remember, that without the co-operation of the practical husbandman, no design of the kind can possibly prove successful. Our chief object is to afford a medium for the interchange of opinions and observations; we therefore not only invite, but entreat, the farmers of the south, to avail themselves of the opportunity to afford, not to us, but to each other, and to their brethren of the north, from whom they receive so much, the benefit of their experience; and they should remember that he who adds nothing to the common stock, can hardly complain if he receives but little from it.

What can *we* do, but strain every nerve to call forth such communications, and then to condense and select from the materials thus afforded? Knowing the difficulty of eliciting communications from men unaccustomed to writing for the public eye, and remembering the old adage, that "what is every body's business is nobody's," instead of waiting supinely for information, we design to go in search of it. Our country friends must not be surprised, therefore, if they find us suddenly intruding upon their hospitality, with no other introduction than our paper affords us. They must consider it as a penalty incurred by their agricultural celebrity, and excuse us for our *cause*. We feel well assured, however, that he who comes on such an errand, will never find himself an unwelcome guest in a southern mansion.

If thus backed and sustained, we can prove successful in our design, we shall be as much gratified by the reflection, that we have been instrumental in exalting this favorite branch of industry in the south, as we can possibly be, by any pecuniary advantage to be hoped for from the enterprise.

In conclusion, it is hardly necessary to ask indulgence for our first number, or to remind our readers of the many difficulties we labor under in catering for them, at first. We hope, that with our progress, our facilities will increase, and that before the year is out, they will be fully satisfied that they have gotten the worth of their money.

THE HENRICO AGRICULTURAL SOCIETY.

We are happy to have it in our power to announce to the public, that an Agricultural and Horticultural Society, under the above title, has been formed in this city. The Society met in December, adopted a constitution, and appointed its officers. The Rev. Jesse Turner, well known for his skilful and successful farming, was chosen President, and Anthony Robinson, jr. elected Secretary and Treasurer. The next general meeting of the Society will be held on the first Saturday in March next, for the choice of Vice Presidents and the despatch of other business. Exhibitions will be made, and premiums awarded semi-annually, in May and October. The details of the first exhibition are under the consideration of an executive committee, of whose arrangements we will take care to apprise the public. The President will deliver an address at the first semi-annual meeting.

This Society has gone into operation, we think, under the most happy auspices, and has been gotten up with a zeal that augurs favorably for its prosperity. We hope to see a spirit excited by its operations, that will give a new face to agriculture in our part of the world. It would be worse than useless to attempt to argue the general question of the benefit to be derived from such institutions. The question is no longer a problematical one. These associations are the very soul of agriculture to the north, and the wonder has been, that the Capital of Virginia could, heretofore, boast of nothing of the kind.

Will not the Farmers of Virginia support this institution, and make it worthy of their native state? The Society is open to all. The annual contribution of two dollars is a mere pittance, compared with the good that may be effected by it. Let the farmers of Virginia, especially those in striking distance of Richmond, not only send their names and contributions to the Treasurer of this association, but let them determine to visit the exhibitions, and vie with each other for the honor of the premiums. In this way a generous emulation may be excited, that will redound, immeasurably to the advantage of every farmer in the community.

One of the first fruits of the establishment of this Society has been, the adoption and presentation, to the Legislature, of a memorial, asking for the establishment of a Board of Agriculture.

TO RENDER GLUE INSOLUBLE IN WATER.—Put a coat of boiled *Linseed* oil on the surface to be glued, and do not apply the glue until the oil is dry.

For the Southern Planter.

BOOK FARMING.

Mr. Editor,—Permit me to relate to you an anecdote which happened to dispel, in one instance at least, the horror so universally entertained of *book farming*. My nearest neighbor, Mr. A. is a strong minded but conceited and uneducated man. He is withal possessed of a good deal of practical knowledge, and has been tolerably successful in his operations Some four or five years ago, I came into the neighborhood quite a novice, and very gladly availed myself of the information which my neighbor, very good naturedly but very pompously afforded me. At that time I took the Cultivator, and imagined I was receiving much information from its pages; my sagacious neighbor, however, who had begun to entertain some hopes of my eventually making a farmer, under his instructions, quite gave me up, I believe, when he found that I was induced to place any dependence in what he sneeringly called "working by book rules." I argued the matter with him, but all to no purpose; at length I hit upon the following expedient: I wrote him a little note, requesting him to send me his plan for the cultivation of sweet potatoes, in the culture of which his pride had been much elated by his notorious success. With this request he promptly complied, and wrote me very full and satisfactory directions on the subject. This communication I forwarded to the late Judge Buel, and it appeared in the next number of the Cultivator. I sent the paper over to Mr. A. with a note stating that the directions, although valuable in themselves, had become worthless because having been printed, they now properly came under the head of *book farming*. Not even the old gentleman's own argument when turned upon himself, was powerful enough to persuade him that any advice, emanating from so sage a person as himself, could be rendered valueless, even by being printed: and although he at first manifested a little pettishness at the trick put on him, not many weeks afterwards I found the Cultivator on his table, and he has since acknowledged to me that the young and inexperienced ought certainly to apply to their older and better informed friends for advice; he begins to think that putting the advice in print does not hurt it at all; but he still insists, (drawing himself up with considerable importance,) that nobody but an individual rather advanced in life, skilful and experienced, should be permitted to write for agricultural papers. I only answer him, with a complimentary bow, that none others ought to be permitted to give advice.

Mr. A. is now a *book farmer*, and having united the experience of others with his own shrewd observations, begins to be in reality, what he conceited himself to be five years ago.

A FARMER.

From the Farmers' Cabinet.

DISEASES IN HORSES.

Mr. Editor,—"An ounce of prevention is better than a pound of cure." A great many remedies for cholic, grubs, &c. have been at various times suggested, of more or less value. I once applied to a celebrated stock man for the best remedy for grubs; his answer was "keep a plenty of salt always within reach of your horse's mouth." Upon this hint I acted, and have now for five years been using troughs divided into three parts, the middle for grain or mixed food, one end boxed up to the floor for long food, with a box for salt at the other end: if that box is ever found without salt my feeder gets an overhauling. This as well for my cattle as my horses, for they are all stalled. Now, sir, I know of no other respect in which my mode of feeding differs from my neighbors, and yet since I have adopted this plan, with an average of thirty head of stock, I have not known a single case of disease amongst them. If by it I have saved the life of only my meanest ox, I have made three hundred per cent. on the cost, which is as good an outlay as ought to be expected at farming.

When I see some of my neighbors calculating that the cultivation of such a root will pay fifty per cent.; such a new variety of corn an hundred, I frequently laugh in my sleeve, because I know that the men proposing these magnificent returns, are, at that very moment, entirely indifferent to an hundred little fixtures, that would pay three or four hundred per cent. by the saving and facilities they would cause. My rule is, if I have ten dollars, to ask myself how I can invest it to give me the greatest return, and until I get my farm rich, and provided with certain fixtures and conveniences, I am not going to any extraordinary outlay for improved corn, spring wheat, or Berkshire pigs; because I know that I am yet in want of several things, that will repay me many fold better than improved *corn* or *pigs* either. I want to "prepare my cage before I buy my bird." Am I not right?

Yours, &c. MARTIN.

To a certain extent, if we may be permitted to say so, we assuredly think our correspondent, Martin, is right. We have certainly seen some, young beginners especially, allured by the extravagant calculation sometimes made by sanguine writers, invest money and labor in projects (good perhaps in themselves,) to the neglect of some matter, much more material to them at that particular juncture, which being more *familiar*, was not perhaps so *attractive*. As our writer says, the mere fact, that such an investment will probably be profitable, should not always induce one to make it. The question should be, is it the best investment that could be made under the particular circumstances of the case? We think we have seen some farmers with fencing very indifferent, stabling not of the best, or pastures of the richest, who had laid out large sums of money in buying fine Durham cattle, at high prices. We are not

sure but that some such idea, as that the cage had better have been fixed before the bird was caught, did come across our minds upon such occasions.

CAPITAL.

We have been permitted to copy the following from a letter, written by a very celebrated agriculturist of this state, to his son, who had consulted him as to the propriety of selecting agriculture as a profession:

My Dear Son:

The occupation you propose to adopt, is one highly honorable in itself, and one that I think peculiarly suited to your investigating mind and industrious habits. But let me warn you that it is one much misunderstood, and one, in which frequent mistakes and miscalculations are made in the outset.

One of the greatest errors committed in farming, arises from an erroneous impression that this business may be undertaken with less capital than most others. This I conceive to be the prolific source of many difficulties, which will readily suggest themselves to the mind of any one, who has been engaged in conducting a manufactory of any kind. How often is it that we see a manufacturing establishment, in itself good, and under favorable auspices profitable, failing entirely for want of necessary capital? How, in this respect, does the farmer differ from the manufacturer? What is he, indeed, but a manufacturer? How often does the most pressing work remain undone, and the season pass unimproved for want of means to procure necessary labor or implements? How often is the farmer working at the greatest disadvantage with old or imperfect tools, because he lacks the means of purchasing new ones? Like every other producer, he is obliged to spend money before he can get it back, and it is the height of folly to commence the business without sufficient floating capital, to meet contingent expenses. The mechanic knows that, unless he can provide a sufficient capital, not only to lay in a certain amount of stock, but also a sufficient sum in ready money to meet unavoidable and contingent expenses, he had better remain a journeyman in the employment of others; but the inexperienced farmer imagines that if he can get credit upon his land, and hire his negroes, he may trust to Providence for the balance. Is it wonderful that he is disappointed, and that when all his bright visions have vanished, he lays to the door of his occupation, what was the natural consequence of his own egregious folly? I do not mean to say that a small business may not be well done with a small capital; but that in this, as in every other business, success very much depends upon regulating the scale upon which the business is done, by the amount of capital that can be commanded. A great deal too depends upon the proper distribution of capital. To make this or any other business lucrative, certain fixtures and conveniences are absolutely necessary; and when I have been told by a farmer that he could not afford to build warm and comfortable stabling for his cattle, or to avail himself of a decided and admitted improvement in an agricultural implement, I have been inclined to ask him what he would think of a blacksmith, who informed him that he meant to blow his fire with his mouth, because he could not afford to buy a pair of bellows.

It very frequently happens, that a farmer, with a more than sufficient capital invested in land, negroes and stock, is absolutely in want of a floating capital, out buildings and implements.

That, under such circumstances, he does not convert a portion of his superfluities into means which will supply his wants, is not less strange than true, and this love of fixed capital, this devotion to extensive landed property, even to the risk of straitening and cramping himself, is the besetting sin of the southern farmer. How often do we see men of extensive property, farming under the most disadvantageous circumstances for the want of ready money? They prefer the *dignity* of doing a *large* business *badly*, to the *satisfaction* of doing a *smaller* busines *well*. Let him sell five hundred of his thousand, or two hundred and fifty of his five hundred acres, and make a like reduction in his negroes and stock, and with the means thus obtained, let him provide for the better cultivation and keeping of the balance, and my life upon it, that at the end of the year he will find his clear profit doubled, and this effected with half the vexation and trouble that attended his former course.

There is no more uphill business than farming, without a sufficient amount of means to supply its various demands, and there is surely no more elegant and charming occupation, when it is satisfactorily conducted, which I repeat, can be done only by a man who, in homely, but expressive phrase, is *before-hand-d*, that is, provided with means to meet every call that his business will make upon him.

To this thing of injudicious outlay is to be attributed much of the farmer's difficulties. Let him, instead of laying out all his means in a large tract of land, reckon what will be required to erect good buildings, and purchase the best implements, make good enclosures, &c. and then buy only as much land, as he can purchase with the balance of his money.

There are other points which I must make the subject of a future communication.

Yours, &c.

We showed the above, in manuscript, to one of our friends, who expects shortly to commence the life of a farmer, and he begs that we would respectfully solicit

some of our experienced agricultural friends to communicate, through the columns of the Planter, full and *specific* advice for the judicious outlay of five thousand dollars in farming. What proportion of it should be devoted to buildings, what to stock, what to implements, what should be reserved for contingencies, and what appropriated to the purchase of land? Will not some of our agricultural friends confer such a favor upon him and the community?

To the Editor of the Southern Planter.

Why is it, that of all the arts and sciences, agriculture, the most noble, the most universal, and the most important, has attracted so little the attention of scientific men? Why is it, that the labors of the student and philosopher, applied to other subjects, command the respect and admiration of the world, and meet only with scorn and contumely when devoted to this most important branch of human industry?

Truth is powerful, and the public is generally very discerning, especially upon subjects in which they are peculiarly interested. Is the universal prejudice, then, against what is called book farming, founded in justice? We verily believe, that, heretofore, to a considerable extent, it has been. The truth is, agriculture is a science, and like all other sciences is founded on *fact*. Now, sir, scholars in the popular acceptation of the term, have, heretofore, been the only persons who could be induced to appear before the public; and they are generally very little informed of the *facts* belonging to agriculture, for whilst the philosopher in his closet, may become fully acquainted with all the motions of the heavenly bodies, whilst with his retort and crucible he may elaborate chemical facts, every moment, it is only by a long and tedious apprenticeship, that he can become acquainted with the more intricate, and more slowly elaborated facts, of agriculture. He must await the revolution of the seasons for the development of a single experiment, and he must have held the plough himself, to have become fully acquainted with the mechanical department of the science, upon which much of its success depends; and you might just as reasonably expect a literary essay from the uneducated husbandman, as a valuable agricultural essay from a mere belles lettres scholar.

But, sir, a better day is dawning for the American agriculturist. The educated and the talented, now that the more attractive professions of law and medicine have become so crowded, are thrown back upon this most independent and charming occupation. They will soon redeem it from the disrepute into which it has most unjustly fallen; and the day will come, when to be a distinguished scientific agriculturist, will confer as much honor, as excellence in any other pursuit.

Men are beginning to learn too, that truth is the essence of all valuable literary productions, and that its absence cannot be atoned for by the most flowing words or the most polished style.

Encourage this spirit. By every means in your power, induce the practical farmer to lay aside his reserve, and to furnish you with *facts*.

With the most ardent wishes for your success, and with a determination to follow the advice I give others,

I remain your obedient servant,

ARATOR.

It is with great pleasure we publish the above, from a most valued correspondent, especially the promise contained in the latter part of it. To his sentiments on this subject, in which he is a perfect enthusiast, we most heartily respond. Is it not singular that for every other art an apprenticeship is considered necessary, and yet is it not true, that for this most complicated and extensive science, no previous information is required? Indeed, the general opinion seems to be, that not even talent is requisite, for if a man has a son, of whom he despairs making any thing else, he, of course, intends him for a farmer. A greater mistake was never made, than to imagine that this art can be practised to the greatest advantage, without a devotion and a reach of mind, that is hardly required by any other, in the whole circle of the arts and sciences; and that men without talent and without information do partially succeed at it, only proves the very great natural advantages and profits of the business, which we believe to be, generally, much underrated.

SEED WHEAT.

The name of the distinguished author of the following article would recommend it to the consideration of every farmer in Virginia, even if its intrinsic merit, and the importance of the subject did not command attention. It is extracted from an old number of the Virginia Herald, and we do not know that it has had a more extended circulation, than that afforded by the columns of that paper.

To the Editor of the Virginia Herald:

Sir,—As the time of harvest is approaching, I address through your paper, my brother farmers, on the importance of allowing wheat intended for sowing, to be entirely ripe before reaping. Accident last year, and eye-sight this year, have convinced me of the propriety of this course.

In the year 1829, having selected my handsome ears of Mexican wheat, and sowed it in the fall of the same year, it was forgotten last year, until my little son reminded me that it ought to be gathered. It was then from seven to ten days after my other wheat of the same kind had been cut. This wheat was then gathered and deposited in a bag. Last October,

this wheat was seeded on the same day, in the same manner, and adjoining to other Mexican wheat. No selection of land was made for it, as no experiment was intended. It has survived the fly, and the last severe winter with little injury, but not more than one-third of the adjoining wheat has been left alive. From its present appearance, it will produce, I believe, two-thirds more than its adjacent neighbor.

Can the keeping in the bag be the cause of this superiority? I believe not, because in several previous years, seed has been kept by me in the bags, and no similar result has taken place; my inference thence, is, that this difference must be owing to the entire ripeness of the seed. Should any reader of this communication have doubts on this subject, it would give me great pleasure to show him the growing wheat, which will convince, I should think, the most skeptical

From my twenty-four years experience as a farmer, I am also satisfied. that the smut is mainly attributable to unripe seed wheat. My seed wheat has been always riper than that of my neighbors, and during that period, I have never seen but six smutted heads in my own crops In a conversation with the late Mr. Isaac Williams, he confirmed my opinion, by stating to me the same practice of one of his nearest neighbors, attended by the most entire success.

In making this communication, the interest of wheat growers is my sole object, and if, by it, their crops should be increased, it will contribute to the happiness of your obedient servant,

JOHN TAYLOR.

Liberty Hill, Caroline.

HAY.

It has often occurred to us, that this is a crop much and strangely neglected in Virginia, and, we believe, in the southern country generally—and why it is so, we have been somewhat at a loss to divine. That it pays better, under certain circumstances than any other crop, not excepting cotton itself, can, we believe, be easily demonstrated. When suitable land is once prepared, the after cultivation is nothing, and the gross yield in our markets, is certainly not less than forty dollars per acre.

As to the extent of market, we can only say that there has been a time when 5,000 bales of northern hay, averaging 400 lbs per bale, were sold in the city of Richmond alone, in one year. Why is this? Is there any thing peculiar in their soil or climate to render us dependant upon the north for this article? Assuredly not. We were struck with a singular fact that happened to come to our own knowledge a few years since, whilst on a visit to the north. A gentleman whose hay crop generally came to the south, frequently to Richmond, had given $200 an acre for good grass land, hundreds of miles from his market, whilst lands within fifty miles of that very market, of very superior quality, would not sell for $50 an acre. That some portions of our soil are, or can be made equal to any north of the Potomac, nobody can doubt. Is there any difficulty in the climate? Although some grasses may not grow so well with us, yet certainly, in the great variety known to the agricultural world, it cannot be, but that there are some to which our genial climate is peculiarly adapted.

Indeed, we have heard the opinion frequently expressed by a most judicious and observing man, long the keeper of a livery stable in this city, that the hay raised in our own vicinity possessed a sweetness and flavor that induced his horses to prefer it greatly to that brought from the north.

But we are very apt to do as our fathers did before us, and because they made only corn, wheat, and tobacco for market, so will we, without regard to increased demand for other crops.

The northern hay, we believe, is never preferred, except, for the portable and convenient shape in which it comes. The bales, in which it is packed, enable a larger quantity to be put in small compass, a great desideratum in a crowded city, or in any bulky article intended for market. We want very much a cheap and convenient HAY PRESS, and we have already made a memorandum to look for such an article, in a trip we contemplate making, shortly, to the northern cities.

In the mean time, we shall be much obliged to any of our correspondents, who will furnish us with the result of their experience, in the cultivation of grasses in Virginia.

GREAT YIELD.

In the Ithaca Chronicle, we find the following statement of the amount and value of production from one-fourth acre of land in that village, cultivated by Mr. Aaron Curtis, who furnished it for publication:

140 bushels of onions at 50 cents,	$70
600 head of cabbages, at 5 cents,	30
50 bushels beets, at 50 cents,	25
	$125

We doubt very much, if this quarter acre did not yield a greater nett profit, than some pretty extensive farms we wot of.

'Tis true this appears to have been done in the vicinity of a village, where, probably the facilities of producing were greater than could be commanded on a more distant farm, and where the product was more merchantable. If a farmer in Virginia should cultivate many quarter acres in this manner, he might perhaps experience a difficulty in finding a market for his products, and we look upon accounts of such yields,

which we frequently see from the north, rather as curious, in exemplifying what may be obtained from a small portion of ground, than as examples to the farmer, especially the southern farmer, to follow on a more extensive scale. His great crop must always be, corn, oats, hay, wheat and tobacco, none of which require the great outlay and quantity of labor, that were certainly expended on this quarter acre. Such things belong rather to horticulture than agriculture. There is, however, a certain point of fertility, to which every acre should be brought, for even these crops, before another is put in cultivation. The question for the farmer is, how he shall bestow his labor so as to obtain the greatest yield, not in bushels, but in value. Suppose he has ten acres of land, and five hundred bushels of manure, shall he put it all on one acre, and cultivate that only, or shall he divide the manure and the labor amongst the ten acres? Now, we imagine, the answer to this question will depend upon a variety of circumstances. His land may be so poor, that the five hundred bushels of manure, applied to one acre, would cause it to yield as much as the same amount scattered over the whole ten. Thus he saves all the labor and expense of manuring and cultivating the other nine acres, by applying all his means to the one acre. But his land may be comparatively rich, and although it be true perhaps that the amount of yield is in exact proportion to the amount of fertilizing application, up to a certain point of fertility, there is a point, beyond which it does not hold true. Certainly a man would be mad, to apply a thousand bushels of manure to a yard square. Now the quantity that may be applied profitably, is certainly greatest where root crops, or garden vegetables are raised, and although these are not sufficiently cultivated and attended to in the south, it would be folly for a man, either north or south, to hope to cultivate many acres as profitably as Mr. Curtis did his quarter acre. We hold then, that to gather and concentrate manure up to a certain point, which depends somewhat upon the crop cultivated, is the great secret of farming. We hold also, that the profitable fertilizing point is much lower in those crops, which are in universal demand, than those raised by Mr. Curtis, which are more limited in use, and which will not keep, if they are not sold. Still we are afraid, that it will be long before the generality of our lands are brought even to the point desirable for our crops, and we apprehend that we shall be considered a little premature in warning our subscribers against putting too much manure to the acre yet awhile.

Many of the products, now peculiar to the old world, are probably susceptible of cultivation in the new; and whilst, most probably, those which are the great staples of the country will continue so, yet, undoubtedly, much that is subsidiary, much that will add to the comfort and pleasure of the agriculturist, is yet to be acclimated. The American Farmer states, that an eminent horticulturist, in New York, has recently gone largely into the culture of the Languedoc Almond, the best variety of this fruit raised in France. He has raised in the vicinity of New York city, this year, 10,000 of these trees, many of which are five feet high, having made a most luxuriant growth. He is confident the trees will prove perfectly hardy and in the third season will yield fruit abundantly

In Texas, an enterprising horticulturist has a nursery of olive trees which are growing finely. This is among the most valuable of all the vegetable productions of the earth. The tree begins to bear when it is three years old, and continues to produce largely to a very great age, improving its fruit every season for many years after its first yield.

The Quebec Mercury contains answers to interrogatories, propounded by the Agricultural Society of Lower Canada, to the celebrated agriculturist, Sir John Sinclair, in which he expresses the opinion, that the improved dairy cows, in the western counties of Scotland, are certainly now the most celebrated and valuable breed of milch cows in Great Britain, or any other part of Europe. That the fair average of the annual returns of milk given by thousands of the best of the Ayreshire dairy cows, when they are in good condition, and well fed, and when they drop their calves about the end of the month of April, will be nearly as under.

First 50 days,	24 quarts,	-	1200
Second "	20 "	- -	1000
Third "	14 "	- - -	700
Fourth "	8 "	- -	400
Fifth "	8 "	- - -	400
Sixth "	6 "	- -	300
			4000

He says that the Durham, or Teeswater, breed are superior, as dairy cows, to any other breed in England, and if they were as well fed and treated as the Scots dairy stock, they would equal them in beauty and good qualities.

Some milch cows, of the best sort, and in good condition have been sold as high as 25*l*, but young cows, from two to three years old, and in calf, may be procured of the best sort, at from 10*l* to 12*l* each, or still cheaper.

For the propagation of a dairy race, bulls that have most of a feminine aspect, are preferred to those that are more masculine. A dairy bull of good shape and quality, may be procured for about 14*l* to 15*l*.

He states moreover, that the quantity of butter yielded by cows, depends more on the food

given them, than on any peculiarity of the breed of cattle. Clover, turnips, and new herbage afford most milk. Natural pasture, or what is called old turf, yields milk which produces most butter. To make the best butter, milk should not be allowed to stand longer than from 18 to 24 hours, since the first cream cast up is always the best. Sixteen quarts of milk, he states, from the Scots dairy cows, will on an average, yield 24 ounces of butter, so that the average return of these cows, when of good quality, in right condition, and properly fed, is 375 lbs. avoirdupois of butter, per cow, per annum.

From this statement, we infer, that the favorite Durhams are not esteemed the best milch cows, and that some of our credulous farmers, who have paid a thousand dollars for a cow, purchased in England probably for $100, if Sir John is to be believed, have been pretty well humbugged.

For the Planter.

GRUBS IN HORSES.

A Doctor Harding, of Kentucky, I think, wrote once a very ingenious essay, to prove that there was no such disease as the grubs; but, that the worm was a natural inhabitant of the horse's stomach, and never commenced its ravages upon it until after death.

Certain it is, that happening to be present at the death of a horse, last summer, which was occasioned by an accident in our streets, I was curious enough to make a post mortem examination, with the assistance of a medical friend, We examined the horse's stomach, in an hour after his death, and found it riddled by the worms. It was exactly such a case, as would have been held to be confirmation strong of the grubs theory, if the cause of death had not been known. To be sure, this only goes to show, that the fact of the stomach's being perforated, is not evidence of death from grubs. But if it so happens that this fact, the only one ever advanced to prove the existence of the disease, turns out to be no evidence of its truth, what becomes of the theory? Now sir, this question is not an idle one, or unimportant in its consequences. If grubs never attack the horse, what is the cause of the violent pain to which he is sometimes subjected? Having been much interested in the subject, from the fact that I owned some very valuable blooded stock, this point attracted my particular attention, and from all that I can see and hear, I have become satisfied, with Dr. Harding, that there is no such original disease as grubs; but that that, which is so frequently mistaken for it, is neither more or less than violent CHOLIC. Acting upon this supposition, I have treated the disease as such, and with great success. I have never failed to relieve a horse, by giving him an injection, composed of a half oz. of assafœtida, well rubbed up, and mixed with a pint and a half of warm gruel, which, if it did not operate, might be succeeded by a second injection, of a pint of linseed oil mixed in a pint of warm water. The assafœtida must be well rubbed up, and gradually mixed with a pint of water, which will become thick and milky in appearance. Let the injection be well stirred when it is administered. Bye the bye, every man, who keeps stock, should have a large clyster pipe, as he will frequently find it much the most efficient and convenient mode of administering medicine. But if he has no such instrument, cholic may be relieved by drenching the animal with two table spoonfuls of laudanum, mixed in a pint of linseed oil.

If you choose to make my practice public, my name as authority, is at the service of your readers. M.

SOUND SEEDS.

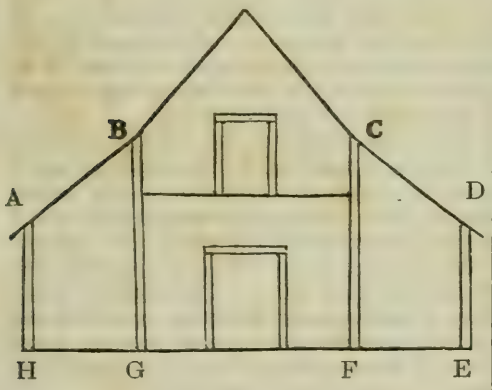
As the season approaches when our readers will be sowing and planting, we take the liberty of abridging from Cobbett's valuable treatise upon Gardening, some directions as to the choice of seeds, the importance of which is too manifest to be dilated on.

He says, I know of no seed, which, if sound and really good, will not sink in water. The unsoundness of seeds arises from several causes; unripeness, blight, mouldiness and age, are the most frequent of these causes

The way to try seed is this. Put a small quantity of it in *luke warm* water, and let the water be four or five inches deep. A mug, or basin will do, but a large tumbler *glass* is best; for then you can see the bottom as well as top. Some seeds, such as those of cabbage, radish, and turnip, will if good, go to the bottom at once. Cucumber, melon, lettuce and endive, and many others, require a few minutes. Parsnip and carrot, and all the *winged* seeds, require to be worked by your fingers, in a little water, and well wetted before you put them into the glass; and the carrot should be rubbed to get off part of the hairs, which would otherwise act as feathers do to a duck. The seed of beet and mangel wurtzel, are in a case or shell. The rough things we sow are not the seeds, but the cases in which the seeds are contained, each case containing from one to five seeds. Therefore the trial by water, as to these two seeds, is not *conclusive;* though if the seed be very good, if there be four or five in a case, shell and all will sink in the water, after being in the glass an *hour*. And as it is a matter of such great importance, that every seed should grow, in a case where the plants stand so far apart; as gaps in rows of beet and mangel wurtzel are so very injurious, the best way is to reject all seed that will not sink, case and all, after being put into warm water, and remaining there an hour.

There is another way of ascertaining this important fact, the soundness or unsoundness of seeds, and that is, by sowing them either in a hotbed or under a handglass. But there is this to be said, that with a strong heat under, and with such complete protection above, seeds may come up that would not come up in the open ground. There may be enough of the germinating principle to cause vegetation in a hotbed, and not enough to produce it in the open air and cold ground. Therefore, I incline to the opinion, that we should try seeds, as our ancestors tried witches, not by fire but by water; and, that following up their practice, we should reprobate and destroy all that do not readily sink.

I always sow new seed in preference to old, if in all other respects I know the new to be equal to the old; and as to the notion, that seeds can be the better for being old, even more than a year old, I hold it to be monstrously absurd, and this opinion I give as the result of long experience, most attentive observation, and numerous experiments, made for the express purpose of ascertaining the fact.



COMMUNICATED.

If, sir, you think the following worthy a place in your paper, you and the public are welcome to it.

Having become fully satisfied of the economy and expediency of housing and stalling all my stock, I resolved in 1837 to build a stable for the purpose. I fell upon the following plan, which more than answered all my expectations. I do not know that there is much novelty about it, but as it is recommended by its cheapness, and as I found it extremely convenient, I submit it, with the subjoined sketch, for your consideration.

All your readers, I presume, know how to build a house, "post in the ground." For such purposes as this, I believe it to be the best and cheapest mode.

I premise, that being compelled to use white oak posts, to prevent their rotting, I charred the but-end and then filled up the clefts, and covered the whole with a good coat of pitch, or boiled tar; taking care to extend the operation to about twelve inches beyond the part to be inserted in the ground.

At the expense of being considered tedious and minute, I give you an exact description of the building; for this, although perhaps uninteresting to the general reader, is, I know by experience, extremely desirable to the individual who may determine to avail himself of it.

The sketch represents the front view of the stable, and is nothing more than the usual form of a barn, with sheds off, supposed to be stripped of weather-boarding.

The building was erected by setting in the ground, two feet deep, four rows of posts, the front ones of which are seen as A H, B G, C F, and D E. In each row there were eight posts, six feet apart. The posts in the extreme rows were eight, and those in the two centre rows were fifteen feet out of the ground. The distance from F to G, or the width of the centre building was twenty feet, from E to F, and from C to H, or width of sheds, was ten feet. Each shed was, by this means, divided into seven stalls, each stall 16 feet by 6. Each stall was partitioned off separately, and had a door of its own. The lower part of the centre building was open, and joists 3 by 10 were notched into the long posts, three feet from the top, thus giving a room below of 42 by 20, with a pitch of 12 feet, leaving a spacious loft above. The house was built of good timber, well shingled and painted.

In the partitions which separated the lower rooms from the sheds on both sides, a width of 16 inches was left open, just above the troughs in the sheds, so that the feed might be distributed to all the animals from the main room. In this room below, against the backside, were placed locked bins, to contain ground food. The long food to be cut up, was of course deposited in the loft above. When the food passed through the cutting knife, it fell into a funnel in the floor above, which conducted it into a large box beneath, with a portion partitioned off for mixing.

The large room below, served not only as a deposit for tools and implements, but was used chiefly as a work room in rainy weather. This alone was worth the cost of the whole building. My cattle used the stalls in one shed, and the horses the other. Every ox and milch cow, as well as horse, was turned into their own stall at night, well littered, rubbed and fed.

I fell upon this plan, Mr. Editor, because, not being over rich, I found I could not *afford* the old system; and sir, it is wonderful the difference this simple arrangement made in my annual profits. Well housed and well littered, my stock, I am sure, upon half the food they destroyed before, looked much more lively and

healthy. I found two horses less expensive, and more effective than four. One milch cow, under the new, gave me more and better milk than five under the old system, and my oxen were fat enough for beeves through the whole winter.

When the pitiless storm came, and the winter winds whistled around me, I could lay down and sleep in peace, because I knew my cattle were protected from its fury, which, under other circumstances no honest farmer can do.

There is some inconvenience, but many more advantages, in having your stalls separated, with a separate door to each. You can turn in your tired beast unfettered and unhaltered, to dispose of his wearied limbs at pleasure. In case of a fire, you can extricate him much easier, and you can clean your stables, (a thing to which particular attention should be paid) with much greater facility.

When I have added that bars were substituted for doors to the stables, in summer, I believe I have imparted all upon the subject worthy your attention. S.

EARLY CUCUMBERS.

Mr. Editor,—As you propose to bring horticulture within the scope of your consideration, I will inform your readers of a very successful plan resorted to by an old gardener of my acquaintance, which may be interesting to those who are curious in the production of early vegetables. He filled any small vessel, (he generally raised a number of cymlins or gourds for the purpose,) with rich mould, in which he planted his cucumber seed, as early as probably the first of February; keeping them in a room where they were protected from the cold and frost, and being portable, it gave him very little trouble to expose them to the sun, at favorable opportunities. When there was no longer reason to fear injury from the frost, he had finely developed plants, which he set out in the open ground, by merely preparing a hole, in which he deposited the undisturbed mould, breaking the gourd, or removing the sides of the vessel, which he sometimes made of plank with sides and bottom to hinge. In this way, he always had two or three dozen cucumber vines, which were ahead of those raised in his neighbors' hotbeds, because they had not been retarded by transplanting. A large hotbed might be substituted as a deposit for the gourds, which would save the trouble of moving in and out of the room. There are of course other vegetables to which the same process would be applicable. H.

THE PLOUGH.

This instrument, so necessary to, and so characteristic of the farmer, is much neglected. The most important and the most expensive operation to be performed by the husbandman, is to be effected with this implement. It is, therefore, a point of the greatest importance, that he should have his plough of that form and shape, that is calculated to work in the best and easiest manner; and farmers, generally, are little aware of the very great difference in ploughs in this respect; and whilst they have provided themselves with patent churns, and patent beehives of the latest construction, they continue to use a plough, the idea of which may have been obtained from the Georgics of Virgil, or from the sample preserved in the Chinese exhibition. This is what is vulgarly termed, "stopping the spigot and opening the bung." It is certain, that many farmers are doing inferior work with double labor, and all, for want of knowing what is the best construction of plough. The truth is, the farmer is seldom a mechanic, or the mechanic a farmer, and without the combination of the two qualities, this important instrument cannot be brought to perfection. Different forms are required, undoubtedly, for different soils, but we are inclined to think that there are some forms, used in our own neighborhood, that are very unsuitable for cultivating any soil that has yet been discovered. As the art of spelling is said "to be no great accomplishment, yet to be without it betrays the extremest ignorance," so to have the best plough, is neither very difficult of attainment, nor a feat on which a farmer should greatly pride himself, yet to be working with an indifferent one, is abominable.

In the last number of the Cultivator, there is a long and detailed account of some experiments made in England, which whilst it is neither finished, nor entirely satisfactory, proves, beyond a doubt, that some ploughs work with half the labor of others in use. This fact is ascertained by an instrument called a dynamometer, which may be readily imagined, but is imperfectly described, as showing the power expended in the draft, by the compression of springs inserted between the plough beam and the chain.

The result of these experiments goes to show, that Hart's improved Berkshire wheel plough was the one requiring the least draft. It was particularly compared with Ferguson's improved Scotch plough, which it was found to excel in several particulars. Cuts are given of these two ploughs, but they afford us an imperfect idea of the shape of the mould board, and exhibit little, but that the one is, as its name imports, a plough with a wheel in front, which regulates the depth of the furrow, and which was supposed to act very advantageously, except on soft ground, where the wheel, instead of governing the depth of the furrow, sunk in the soil, and dragged through it like a coulter.

Mr. Pusey, the experimenter in this case, discovered that the rule laid down in books generally, that "the draft increases according to the square of the depth of the furrow," was entirely

erroneous, for whilst the dynamometer showed the power required, in a furrow of 5 inches, to be equal to a resistance of 322 lbs., the resistance in a furrow of 12 inches in the same soil, was only 700 lbs., instead of 103684 lbs., which it would have been by the same rule. This is a matter of considerable importance, and has great bearing upon the question of deep ploughing, which has been objected to on account of the supposed great increase of labor.

In a somewhat similar experiment made at the Worcester ploughing match in Mass., it appeared that a plough, constructed by a Mr. Charles Howard, was found most effective for lapping the furrows, and one by Messrs. Prouty and Mears, the best for flat furrows.

We shall procure one of each of these for exhibition at our office as soon as possible.

For the Planter.

MANURE.

The long mooted question as to the mode of applying manures, seems to be carried by the current of public opinion, in favor of *Top Dressing*. With respect to the wheat crop and the grasses in general, there can be no doubt that the most economical and efficacious mode is to scatter the manure upon the surface in early spring, whilst the ground is yet frozen and susceptible of being pressed without injury.

As to the mode of its operation, that is not of so much importance to the great mass of farmers, as the fact that it is the *best* mode. Still, as the peculiar operation of manures, and the whole subject of the vegetation of plants, is not only of the greatest importance, but even yet involved in the greatest mystery, it may not be altogether useless to call the attention of your readers more particularly to the subject. And let me premise what I am going to say, by assuring the public, that I have no favorite theory upon the subject, to which I am about to bend the facts. This I consider the great bane of agricultural communications, and editors themselves are not always invulnerable to the charge. By the importance which they sometimes attach to a favorite theory, manifested by the zeal with which they defend it, and the neglect of facts, which are always to them of secondary importance, they remind me of a conversation I happened to overhear in one of our bookstores. A gentleman asked for Judge ******'s late work upon the constitution, which the bookseller handed him, remarking, that the Judge had another work ready for the press, the object of which was to show, that "the great error of the banking system was the basing paper money upon a metallic currency at all;" and that the Judge was only waiting to obtain some *information* upon the subject of banking before he published his work. Now sir, many agricultural writers, I think, not only form, but unlike the careful gentleman above alluded to, actually publish their theories, before they obtain their information.

But let not gentlemen take this charge too seriously to heart. Sir Humphrey Davy, himself, fell into the same error, when, having concluded that the best mode of using manure was to plough it in, he proceeds to explain it by saying, "exposure evaporates the most valuable part of it." But suppose Sir Humphrey had lived at the present day, when the fact is known, that the most efficacious mode of using manure, is that of surface application, what would he do? Would he pervert a well established fact, for the purpose of sustaining a false theory? We think not. He was not the man to commit an error twice. His intellect was too expanded to be narrowed to a single idea—he would diligently investigate a fact, which is in such direct opposition to preconceived opinions; he would probably, discover that the portions of manure evaporated by exposure, are not necessary or conducive to the growth of plants—he would find, that the nutritious particles sink to the roots of the plants, just when they are fit to make use of them, instead of being removed out of their reach by the time they become operative; and from these, or other facts, to which a minute investigation would lead, he would draw conclusions probably, of the very highest importance to agriculture. Will not "haughty" science now-a-days stoop to a theme so humble? Let her remember, that the end may ennoble the means; and that its powerful influence upon the fortune of mankind, may impart sublimity even to a dung heap.

Our country has still a Silliman, known through the world, and within our own bosom we have a Rodgers, to whose peculiar province this important subject properly belongs. Would it be, Mr. Editor, too much for the farmers of Virginia to ask of the latter gentleman, that through the columns of your paper, he would be pleased to shed some light upon the constitution and operation of manures?

Yours, B.

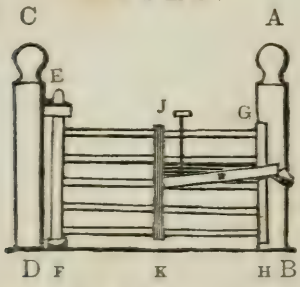
We respectfully unite with our correspondent, B, in requesting Professor Rodgers to turn the light of science upon this, or any other important subject of agriculture, and assure him that any thing from his pen will always find a ready welcome in the columns of the Planter.—Ed.

COMMUNICATED.

Does it not happen, sometimes, that farmers, like other people, are deceived by appearances, especially in the choice of their stock? Is not an animal sometimes selected, perhaps at a high price, for its mere beauty, without sufficient regard to its adaptation to the particular use for which it is designed? We by no means despise a good appearance, even when we have an eye

chiefly to profit, but we are enough of utilitarians to consider *beauty* to be frequently dependent upon *fitness*. We are sure that we have seen some very *beautiful* Durham cattle, purchased at a very high price, that, except to please the eye, were very far inferior to much lower priced, and greatly despised, because ignobly born, animals. The truth is, this stock of cattle is considered valuable, some for the shambles, and some for the pail; and as almost opposite qualities are required in the one and the other, the animal should be examined with special reference to the purpose for which it is designed. We recollect once, desirous to purchase a good milch cow, we applied to a very conscientious and upright gentleman, who, we were informed, wished to dispose of such an one. He stated that he had a young milch cow, of noble blood and beautiful appearance, (as indeed she proved to be,) which could be bought at a high price. The only earthly objection, he said, to her as a milch cow, was, that she gave very little milk, and what she did give was rather indifferent. We think it probable that there is a good deal of the same sort of stock in market, not so honestly described, and we would only remind our brother farmers of the old adage, "all is not gold that glitters."

GATES.



Mr. Editor,—Much of late years has been written upon the subject of farm gates, and having been, a few years ago, something of what may be termed a *fancy* farmer, I resolved that in so important an article, I would have the best, without regard to cost. Accordingly, after examining all I could find written upon the subject, I constructed two or three different kinds, with some improvement of my own, determined to test their respective advantages and enlighten the world upon the subject. Some of them cut a very handsome figure. One of them, in particular, I prided myself upon, and frequently declared to my neighbors that nothing could excel it. The next year I had a projecting kind of jack leg carpenter, from Hanover, living with me in the capacity of overseer, and desiring to have a gate for a particular purpose very quickly erected, in a certain position, I requested my jack-of-all-trades to construct one for me, that might answer until I could replace it with one of my fancy favorites. He went to work after the manner of his country, and made me a gate of the following fashion. A B and C D are posts of the usual kind, from B to D is extended a piece of timber, flattened on the top, and in this piece is bored a hole, in which is inserted the lower end of a common glass bottle, reversed, so that the lower end of E F, one of the uprights of the gate, may work in the sink always found in that part of the bottle. The upper hinge was formed by morticing into the gate post a piece of two by six tough wood, not liable to split, in the centre of which was bored a two inch hole, through which the upper end of E F, being rounded, might pass, and in which it might revolve. Besides E F there were two other uprights, J K, G H, of lesser length, being only the height of the gate. These three uprights were split and hewed out of a cedar tree, the long one when finished, being three by four, the other two, two and a half by four. The slats were neither more nor less than skinned cedar poles, round and straight, of about an inch and a quarter in diameter, passing through round holes bored in the three uprights and wedged at the two extremes. From J K to G H was nailed or pinned a narrow piece of inch plank, to which was attached the common wooden latch, as is shown in the engraving.

Now my man being a clever tinker, the gate certainly presented a much neater appearance than I had expected, and worked admirably, but I still looked upon it as only a temporary affair, to be replaced by one of my magnificent painted gates, with the long iron hinge on the top rail, taken from the Cultivator, as soon as leisure should permit.

Well, sir, I was so fortunate as never to find leisure to take down that gate, until I discovered that, in point of cheapness, durability, and convenience, it was very far superior to its more showy rivals. I have now no other gate on my farm, and the philosophy of the thing I take to be simply this. The difficulties to which gates are liable proceed from the tendency to swag, and the danger of being broken by the velocity which they acquire in falling to. You see then at once the value of a light gate. My maxim is "a *heavy* gate can never be a *good* one." Now my *Hanover* gate, as I call it by way of distinction, is probably the *lightest* that can be imagined. The wood used is peculiarly suitable for the purpose, uniting toughness with lightness in a wonderful degree. Another important point too was here carefully attended to by my cute observer, which is generally overlooked by more learned heads. To use his expression, "the stuff was all gotten out with the grain," which renders the same weight at least tenfold as strong.

I am aware that a great many of your readers, especially in this part of the country, may con-

sider this communication as valueless, because, to them such a gate is as familiar as a worm fence: many however are ignorant of their existence, and very few of those who use them, I believe, are aware that, when carefully made, and well put up, they are indeed more valuable than some they may have seen or read of, that looked much better and cost much more.

GENERAL McDUFFIE'S ADDRESS.

An anniversary address was delivered, before the State Agricultural Society of South Carolina, on the 26th November, 1840, by that distinguished statesman, General George McDuffie. Gen. McDuffie's reputation as a farmer, though more limited, is not less securely established, than his fame as a politician. He has met with that incontrovertible mark of excellence in his profession, that is not to be gainsayed, success. Any thing that falls from the lips of so talented and experienced a farmer, must be read with avidity, and we wish our limits permitted us to transcribe the whole address, which is marked, throughout, by sound sense, clothed in plain and unaffected language.

The first great error that the General points out in southern farming, is the exclusive direction of the whole available labor of the plantation to the production of the great market staple, and the consequent neglect of all the other commodities, which the soil is capable of producing, and which are essential to supply the wants of the establishment. He seems to think, that he must be but an indifferent farmer, who buys any thing that his farm could produce. And anticipating the objection, that other products can be raised only at the expense of a portion of the staple crop, he goes on to show, that if there is less of the staple produced, it will bring even more money, upon the principle, that an increase of an article above the effective demand diminishes the price, not in proportion to the excess, but in a still greater proportion, so that if the planter makes 500 bales of cotton, and buys his stock and meat, he loses what he expends in these articles, because if he made only 250 bales of cotton, and raised his own stock, he would get as much, probably more, for the 250 bales, than he would have gotten for the 500.

Now, although this reasoning is more especially applicable to South Carolina and the cotton growing States, because, in this article there is an over production in this country, yet it is undoubtedly a general truth, that the less a farmer makes for market, the better, provided he substitutes for the excess, articles of equal value, which he needs for his own consumption; not exactly for the reason the General gives, viz: because he thereby decreases the marketable staple, and consequently increases the price; because we apprehend that would not always be the effect. For, if those who raised the stock for him, can no longer find a market for stock, they will produce something else, which, if soil and climate permit, may be the very staple, whose quantity he sought to diminish. And we are not prepared to say, that a farmer can never purchase some products of the earth cheaper than he can raise them; but we think with Gen. McDuffie, that great errors are committed, by failing to take into consideration how much time and food is unemployed on our farms, that could be appropriated only by making our products more diversified.

Another adjuration which he earnestly addresses to the farmers, and which he might as well have extended to every class of his countrymen, is, "to keep out of debt." He stalks before his hearers the ghost of Mississippi, whose bright prospects have all been withered by this blighting influence.

He quotes and endorses the celebrated exclamation of John Randolph, who, in the midst of one of his splendid rhapsodies, in the Senate of the United States, paused, and fixing his eye upon the presiding officer, exclaimed, Mr. President, I have discovered the philosopher's stone; it consists in these four plain English monosyllables, PAY AS YOU GO.

He also relates a saying of an old friend, who, never making a large crop, was considered a bad planter. And when asked, how he got rich so much faster than his more energetic neighbors, replied, "my neighbors begin at the wrong end of the year. They make their purchases at the beginning, on a credit, I make mine at the end of it, and pay down the cash."

Indeed there is no point in the address, upon which the General lays more stress, and none that he argues more ably or eloquently, than the evil consequences of pecuniary embarrassment. We sincerely recommend to our readers a perusal of the whole speech.

RARE FLOWER.

Perhaps few of our readers are aware of the effects which may be produced on fruits and flowers by what is commonly called budding, or inoculating the limbs of trees. We saw a flower, from the garden of a gentleman (who has made many experiments of this kind) combining the qualities of the rose and peach blossom. The stem and leaf were of the peach, except that of the latter was slightly serrated, similar to the rose leaf; the leaves of the flower were of the color of the peach, and taste of the rose; the farina resembled that of the peach. The flower was about four times the size of the peach blossom.—*Old paper.*

HESSIAN FLY.

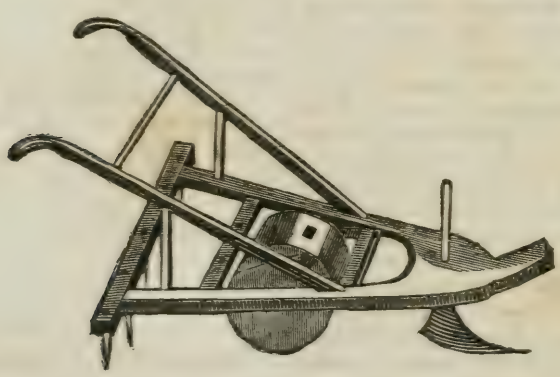
It seems, that even in agricultural science, we are doomed to bow in submission to the superior excellence of the gentler sex. It appears, by a late number of the Farmer's Cabinet, that a Miss Morris, of Germantown, has been bestowing some attention upon that mischievous little insect, known as the hessian fly, and that notwithstanding his cunning, he has been unable to elude the feminine curiosity of the lady. She has established the fact, to her own entire satisfaction, "that the ovum of this destructive insect is deposited by the parent in the seed of the wheat, and not, as previously supposed, in the stalk or culm. She has watched the progress of the animal, since June, 1836, and has satisfied herself that she has frequently seen the larva, or insect in its first stage, within the seed. She has also detected the larva at various stages of its progress, from the seed to between the body of the stalk and the sheath of the leaves. According to the observations of Miss Morris, the recently hatched larva penetrates to the centre of the straw, where it may be found of a pale greenish white semi-transparent appearance, in form somewhat resembling a silk worm. From one to six of these have been found, at various heights, from the seed to the third joint. They would seem to enter the pupa, or second state of existence, about the beginning of June.

"To prevent the ravages of this destroyer of the grain, it will be proper to obtain fresh seed from localities in which the fly has not made its appearance. By this means, the crop of the following year will be uninjured: but in order to avoid the introduction of straggling insects of the kind from adjacent fields, it is requisite that a whole neighborhood should persevere in this precaution for two or more years in succession.

"This result was obtained, in part, in the course of trials made by Mr. Kirk, of Buck's county, Pennsylvania, with some seed wheat from the Mediterranean, in and since the year 1837. His first crop was free from the fly, but it was gradually introduced from the adjacent fields; and, in the present year, the mischief has been considerable."

As we know that some of our male friends, in this section of the country, where the question is one of paramount importance, entertain different views on this subject, we invite them, if their gallantry will permit, to enter the lists with the lady.

FORREST'S PATENT GRAIN PLANTER.



The cut represents a machine for planting grain and sowing seed, invented and patented by a Mr. John M. Forrest, of Princess Anne county, Virginia. A model of the machine has been left at our office, by a gentleman, from the county of Princess Anne, who speaks very highly of its operation. We expect in a few days to have one of the machines for exhibition. Farmers, and the public generally, are invited to call and examine it.

The Sower itself, apart from the fixtures for opening and covering the rows, is neither more nor less than a hollow wooden drum, with a hole in the surface. This drum works on the ground, as a wheel, and, in its revolution, drops the grain through the hole aforesaid. By bevilling the hole inwards, we are assured it is prevented from clogging, and a very simple conductor, on the inside, leads the grain, unerringly, to the hole.

We are perfectly aware, that thousands of inventions, and especially agricultural inventions, are any thing but *improvements;* and therefore hesitate to express an opinion upon an article which we have not seen tried; but this we will

say, that if Mr. Forrest's machine does its work, as well as we have been assured it does, its cheapness and simplicity entitle it, certainly, to the preference over any other we have ever seen.

MISCELLANY.

Under this head, we have determined to devote one page of our paper, notwithstanding its agricultural character, to polite literature. We have done so, under the supposition, not a violent one we hope, that our paper will enter no family, where this page will not be welcome to, at least, a portion of it. We devote it, particularly, to the ladies and younger members; not meaning to insinuate that the head will lack the taste to appreciate its contents, but intending only to express our desire of securing the approbation of that class, which is, and ought to be, so potential in every family. There is no farmer in Virginia, we hope, who will object to relieving the tedium of his homelier toils, by reading, monthly, one page of curious facts or well selected anecdote, although, it may not come exactly under the head of his professional duties. We shall endeavor, occasionally, to present our readers with scraps of chosen poetry, hoping to gratify those who have a taste for the divine art, and to inspire it in those breasts, that are now dead to its charms. We will certainly promise, that, unless seduced by the strongest temptation, we will not exceed, in this department, our prescribed limit of a single page.

PRINTING.

Of all the thousand comments, that we have heard and read upon the importance and benefit to mankind, derived from the ART OF PRINTING, the following, taken from an old number of the Foreign Review, seems to us by far the most grand in conception and the most elegant in diction:

"When Tamerlane had finished building his pyramid of seventy thousand human sculls, and was standing at the gate of Damascus, glittering with steel, with his battle axe on his shoulder, till his fierce hosts filed out to new victories and carnage, the pale on-looker might have fancied that nature was in her death throes—for havoc and despair had taken possession of the earth, and the sun of manhood seemed setting in seas of blood. Yet it might be on that very gala-day of Tamerlane, a little boy was playing at ninepins in the streets of Mentz, whose history was more important to them than twenty Tamerlanes! The Tartan Khan with his shaggy demons of the wilderness, passed away like a whirlwind, to be forgotten forever—but that German artizan has wrought a benefit, which is yet immeasurably expanding itself, and will continue to expand itself through all countries and through all time. What are the conquests and expeditions of the whole corporation of Captains from Walter the Penniless to Napoleon Bonaparte, compared with these moveable types of Johannes Faust?"

ORIGIN OF THE WORD LADY.

Formerly, when the affluent lived all the year round at their mansions in the country, the lady of the manor distributed to her poor neighbors, with her own hands, once a week or oftener, a certain quantity of bread, and she was called by them the *Leff day*, that is, in the Saxon, the *bread giver*. These two words were in time corrupted, and the meaning is as little known as the practice which gave rise to it; yet it is from that hospitable custom that, to this day, the ladies of Great Britain alone serve meat at their own table.

The following exquisite little gem is from the pen of Mrs. Southey, (Caroline Bowles,) and is sufficient, of itself, to immortalize her:

THE PAUPER'S DEATH BED.

Tread softly—bow the head—
In reverent silence bow—
No passing bell doth toll—
Yet an immortal soul
Is passing now.

Stranger! however great,
With lowly reverence bow;
There's one in that poor shed—
One by that paltry bed—
Greater than thou.

Beneath that beggar's roof,
Lo! Death doth keep his state:
Enter—no crowds attend—
Enter—no guards defend
This palace gate.

That pavement, damp and cold,
No smiling courtiers tread;
One silent woman stands
Lifting with meagre hands
A dying head.

No mingling voices sound—
An infant wail alone;
A sob suppress'd—agen
That short deep gasp, and then
The parting groan.

Oh change! Oh! wondrous change—
Burst are the prison bars—
This moment *there*, so low,
So agonized, and now,
Beyond the stars!

Oh! change—stupendous change!
There lies the soulless clod:
The sun eternal breaks—
The new immortal wakes—
Wakes with his God!

As we intimated before, we must apologise for the present number. It is certainly not all we desired, or even intended, it should be. A very fine likeness of a Berkshire boar, belonging to a gentleman in this neighborhood, with which we expected to have enriched our pages, is unavoidably postponed to a subsequent number. An arrangement, which we have made to secure, from an eminent merchant, a monthly report of our markets, was entered into too late for the present copy of the paper. In short, we need only remind our readers of the inherent difficulties in beginning such a work, to secure their indulgence.

We avail ourselves of this opportunity to request every individual who may receive this number, without having ordered it, to retain it as the first of the volume, if he means to subscribe for the work, and, at any rate, in return for the compliment, to mention the undertaking to such of his neighbors as he may think would be likely to patronize it. The expense of publishing is heavy, and we have boldly adventured without a subscription list, relying upon the liberality of the agricultural community to reward our enterprise. We have no fear of the result, if those we know to be our friends will only be a little active in assisting us.

☞ The second number will be sent, in no case, until the subscription is paid; for the low price at which the paper is published, prevents the possibility of opening an account, or trusting to after collection. Post Masters are authorized by law to transmit subscriptions free of postage, and every Post Master in the Union is, *ipso facto*, an agent for this paper.

TO CURE A SCALD OR BURN.

Dissolve a piece of alum, about the size of a walnut, in a half pint of warm water, in which immerse a linen cloth. Apply the wet cloth to the part affected, and let it lie until relief is obtained.

Washing in alum water, is said also to be an effectual cure for chilblains.

We witnessed, ourselves, a few days since, the most miraculous effects from the above recipe, applied to a little boy who had been unfortunately scalded. The child was writhing in agony when the wet cloth was applied; he soon afterwards fell into a sweet sleep, and awoke in a few hours, completely relieved, except in a small portion of the burn, which was inadvertently neglected. That part continues still sore, the after application of the alum water seeming to be not as effectual as in the earlier stage.

TO MAKE IRON SOFT.

Iron that is wanted soft for working, should be cooled by sudden plunging into cold water, instead of being suffered to cool gradually, which renders it hard and difficult to turn.

Mechanics' Register.

POSTAGE.

The Planter is published on one sheet, and by the decision of the Post Master General, is subject only to newspaper postage: that is, one cent on each number within the State, or within one hundred miles of the place of publication out of the State—and one cent and a half to any other part of the United States.

We beg leave to call attention to the following advertisement of Messrs. J. W. Randolph & Co. We are glad to see that the farmers' demand for books begins to be sufficiently great to justify particular attention to this department of the business:

J. W. RANDOLPH & Co. respectfully inform the agricultural community that they have now on hand, and design keeping, a standard collection of agricultural works. They have made arrangements for procuring, at the shortest notice, and upon the best terms, any agricultural work that may be ordered, published either in this country or in England. Farmers are invited to call and examine their stock.

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THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.*

Tillage and Pasturage are the two breasts of the State. *Sully.*

C. T. BOTTS, Editor, MAIN STREET.

Vol. I. RICHMOND, FEBRUARY, 1841. No. 2.

TERMS.

ONE DOLLAR per annum—six copies for $5. To be paid always in advance. Twenty per cent. allowed all Agents.

☞ Postmasters, generally, are requested to act as Agents.

THE PLOUGH.

[In the February Cultivator, an article upon the plough, noticed in our first number, is very ably concluded. The Editor sums up, in the following words, the result derived from the various experiments detailed.]

"From the results of these various experiments those of Mr. Pusey, those at Worcester, and those described in the Magazine, it would seem, in the first place, that the friction or adhesive power of the plow is much greater than has usually been allowed, and that consequently the less surface there is exposed, the less will be the draft. This opinion receives corroboration from the fact that the skeleton plow used in some parts of England where the clay is stiff, a plow in which the cutting part is narrow, and the mould-board of narrow bars of iron, run, easily with two horses, where three or four would be required to move the Scotch plow with its long, broad, smooth iron surface.

2d. That the shorter the working part, or that part of a plow exposed to friction, can be made, consistent with steadiness of motion in the ground, the easier will be the draft. This arises from two causes—the less weight of the implement itself; and less space for adhesion of earth or friction. It is not to be inferred, however, that such short, square-breasted plows, will do the best work; on the contrary, the long plows invert the earth more completely; the advantage is only in the matter of lightness of draft.

3d. That a wheel plow is to be preferred to a swing plow, where lightness of draft is a great object. On smooth, or well cultivated lands, a wheel acts favorably several ways; it lessens the surface or friction draft in the same degree that a weight can be easier rolled than slid over the ground; and it regulates the depth without that constant attention of the plowman that some other forms of this implement require. The wheel, however, will not make a poor plow a good one, though it may obviate some of its deficiencies. On soft, clayey land, the wheel plow is inadmissible, as the wheels clog and add to the weight to be drawn.

4th. That a harness should be so constructed as to give the greatest effect both to the muscular force and weight of the horse, and hence the nearer he is brought to the point where the power is to be exerted, the better. Horses abreast have much more power than when in line; and experience shows that a team works more easily when part of the weight is supported by the back rather than wholly by the neck.

5th. That a pace of 2½ or 3 miles per hour, occasions no heavier draft than a pace of 1½ miles per hour. This is an important fact, where much plowing is to be performed, and it is clear the pace must add to or detract much from the value of the farm or road horse. The pace, however, when once established, cannot be essentially quickened without causing much additional distress to the animal; and the rate of travelling is in a great measure dependent on the training of the colt. Neither man nor beast can exert themselves beyond their usual habits for any time without great suffering; both man and animals have the power of accustoming themselves to movements and exertions, which unless the result of habit, would be impossible or fatal.

6th. While the Worcester experiments show that in the same soil, some plows have more than 100 per cent. advantage in the lightness of draft, the experiments of Mr. Pusey show that the difference in power required to plow loamy sand, and clay loam, is not less. By overlooking this important fact, and by not adapting the plow and the team to the difference in the soils, some farmers are guilty of the most cruel treatment of their animals. A pair of horses is expected to perform labor that would severely tax the labors of four, and this perhaps, is one way to account for the "villainous foundered and spavined" beasts that throng our streets, worn out in a few years, and turned over to the tender mercies of some barbarous master, when if properly treated, they might have been relied upon for many years longer.

7th. It may, we think, fairly be inferred from these experiments, that there are two elements of resistance to be taken into account in the

construction of plows, one arising from the weight to be moved, and the other arising from friction and tenacity. The first is the subject of mathematical calculation; and the best methods of obviating it may be ascertained with certainty. The last is continually variable, differing almost in every field, and therefore not to be met by any demonstrations of theory. The experiments of Mr. Pusey prove that the very construction best adapted to divide and raise the earth, is the one that offers the most resistance by friction. Thus the Scotch plow, constructed on mathematical principles and of a most beautiful model, an implement that expends less power in moving the earth than almost any other, owing to the increased friction it occasions from its extent of surface acted upon, is one of the very heaviest draft plows, to be found. This was proved not only by the experiments made by Mr. Pusey, but by those instituted at Worcester, in both which cases the Scotch plow worked heavier than almost any others. We think also that too little attention in constructing plows, has been paid to the line of draft. It is well known that with a single exception, plows are so constructed that the point of the share is in that line, or in other words the landside of the plow coincides perfectly with the line of draft. This is evident by the birdseye view given of the most celebrated English and Scotch plows in the Encyclopedia of Agriculture, or by an examination of most American plows. The plow noted as an exception, is Prouty & Mears' Centre Draft Plow, the one that obtained the $100 premium, at the Worcester Fair, and which worked 100 per cent. easier than some other plows on the ground. In this plow the coulter and the point incline to the landside so far, that the draft is equal on both sides of the beam, as was proved by its showing no disposition to deviate from its course, when left to its own guidance, and of course imposing no labor on the plowman or the team in their efforts to keep it in a proper position."

SWEET POTATOES.

We were applied to, a short time since, for some instruction as to the best mode of cultivating sweet potatoes. When we inquired of our friends where we could get the desired information, we were universally recommended to a Mr. Joseph Bernard in this vicinity, who has, it seems, obtained an unrivalled reputation for the cultivation and keeping of this valuable root. Accordingly, we made the application, and Mr. Bernard very kindly furnished us the following detailed particulars of his mode of cultivation.

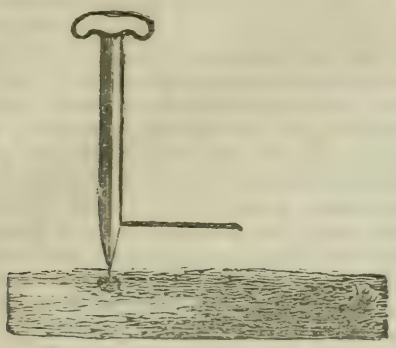
He lays off a bed of any required size, say twenty feet in length by ten in width, from which he removes six inches of the surface earth; this, according to the usual method of making a hotbed, he boards up all round, sloping to the front; the boards at the back, or north side, being two feet high, whilst the front or south side is only one foot in height. He then banks up the earth removed against the outside of the board, all round. In the bed so prepared he puts fresh stable manure to the depth of 15 in. after it is well pressed, keeping the surface flat and level. On this he lays fine rich mould, *free from seed of any kind*, 2½ inches deep, and upon that he places his plantings, one inch apart, and covers them with two and a half inches more of the same mould thrown over lightly, and not pressed down. This is done as near as possible to the 10th of April, and the time he considers important. His bed he covers with a sloping shelter to turn off the rains, but raised a few inches in front to admit the light and air, which is removed, however, as soon as the plants come up.

While the plants are sprouting, he takes a piece of light, poor sandy soil, which ought to have been fallowed the preceding fall. This he again ploughs and rakes down fine and level, about the last of April. He lays off his rows with a single plough not more than two inches deep, four feet apart, running from north to south, these trenches he fills *well* with any kind of old well rotted manure; then with a single plough he turns a furrow on each side of the row, so as to put a cover over the manure about 3 inches deep. This depth may be attained, with care, by the use of the plough alone, without an after resort to the hoe.

Upon these ridges, levelled down smooth and even, the plants are set.

In three or four weeks from the time of planting, if the bed has been properly attended to, the plants will have attained the height of some 3 or 4 inches. When this is the case, he avails himself of such a season as is generally used for setting out cabbage plants, taking especial care that the ground is not too wet, which is even worse than being too dry. In drawing them, he places one hand on the bed, over the root, and with the other gently disengages the plant from the mother root, taking care not to injure the fibres of the root, which he wants to afford a succession of plants.

To set them out he makes a dibble of a piece of wood, about 2 inches in diameter, and about 2½ feet long; four inches from the bottom he inserts another piece, at a right angle, 16 inches long, which being the distance between the plants, the instruments tapered and sharpened at the point serves to lay of the distance, and make the hole for the plant at the same time. The following cut will more clearly show this simple and useful contrivance.



The plants must be set as deep as the first leaf, and the holes must be lightly filled with fine earth, taken between the fingers, and gently pressed against the plant.

When the plants have fairly begun to grow, he throws a furrow to them on each side, with a single plough, taking care not to cover the plant. Attention must be paid to keep grass from about the vines, until they begin to run freely, after which they should not be disturbed. Hence the necessity of poor, clean ground, that troubles you less with grass, which you cannot disturb the vines to eradicate.

Mr. Bernard is very careful never to cover too much vine—he assumes that every point of the vine that is covered sends forth fibres, and produces tubercles; hence, if too many joints are covered, he would have a great quantity of small potatoes, instead of a lesser number of fine ones. His plantings, on the contrary, he obtains by pursuing this course of frequent covering.

This is Mr. Bernard's mode of cultivation: his method of keeping, which is peculiar, and which has been very successful, shall be given in a subsequent number, before the period when it will be required. This though we will suggest at present, that Mr. Bernard is fully satisfied that potatoes raised upon a limed or calcareous soil are much easier kept than when they are raised upon land wanting that property.

Mr. Bernard is a plain, sensible, practical man, who was raised at the north to the business of farming. He began here with 60 acres of poor land, which he has increased in value from ten to forty dollars per acre, and in four years, he has cleared two thousand dollars, besides supporting his family, from the sixty acres.

He considers the sweet potato by far the most valuable root crop he has ever seen, and declares that if the northern climate permitted its cultivation, it would supersede all other root crops in that section. He says that he has found it fully equal to Indian corn for fattening beeves, and much superior for his hogs. He has killed hogs fattened on potatoes alone, and found the fat as firm and fine as that made by the corn itself. As a food for stock he thinks nothing can be superior to it.

The sweet potato vine he thinks an extraordinary fertilizer, and is very sure, that when turned in it affords a great deal more to the land than the root takes from it.

GREAT NATIONAL COLLECTION OF INVENTIONS.

It is with the most lively pleasure we hail the following circular which has been issued from the Patent Office at Washington.

To collect in addition to the models, actual specimens of American inventions at the seat of Government will be to confer a great national favor upon the people of this country.

There is no calculating the good that may result from such an arrangement. The collection of *models* even formed a most interesting exhibition; but models frequently are very imperfect, and afford but an indistinct idea of the working of a machine. To have a point at which any new invention may be actually inspected, with the opportunity of obtaining any information about it that may be required, will be of the most evident and incalculable advantage to every operator in America.

As a matter of course, every manufacturer of an article of which he is not ashamed, will avail himself of the opportunity so liberally afforded him.

The devotion which Mr. Ellsworth has shewn to the interest of the agricultural community entitles him to its most hearty thanks and zealous co-operation.

Patent Office, Nov. 20, 1840.

Notice is hereby given that the Hall in the new Patent Office for the exhibition of manufactures, is now completed. The Hall is spacious, being 273 feet long, 63 feet wide, 30 feet high, and fire proof.

Agents whose names are annexed, will receive and forward free of expense, articles which may be deposited with them. These articles will be classified and arranged for exhibition, and the name and address of the manufacturer (with prices when desired,) will be carefully affixed. Few, it is presumed, will neglect to improve the opportunity now presented of contributing their choicest specimens to the *National Gallery of American Manufactures*, where thousands who visit the Seat of Government will witness with pleasure the progress of the arts in these United States.

If fairs, in limited sections of our country, have excited interest, what must be the attractions of a national exhibition, enriched by daily additions.

The Agriculturist may be gratified to learn,

that commodious rooms are provided for the exhibition of agricultural implements, and also for the reception of seeds for exhibition or distribution.

The Commissioner of Patents being authorized to collect agricultural statistics, avails himself of this opportunity to solicit information of the condition and character of the crops in the several sections of the country. These data will aid him in presenting with his annual report, the aggregate amount of products of the soil, and it is hoped that the public may be guarded from the evils of monopoly, by showing how the scarcity in one portion of the land may be supplied from the surplus in another.

Names of agents who will receive and forward packages for the Patent Office. Collectors of the Customs at Portsmouth, N. H., Portland, Me., Burlington, Vt., Providence, R. I., Philadelphia, Baltimore, Richmond, Charleston, Savannah, New Orleans, Detroit, Buffalo, Cleveland. Surveyors of the Customs—Hartford, Ct., St. Louis, Pittsburg, Cincinnati, Louisville, R. H. Eddy, Boston, Mass., David Gardner, (Custom House,) New York.

HENRY L. ELLSWORTH,
Commissioner of Patents.

POTATOES.

A correspondent of the Boston Cultivator seems to think, from experiments, that the Rohan potatoes have been greatly overrated, and that they are neither so productive nor so nutritious as a potato he designates as the long red, sometimes called long johns. He very correctly remarks that erroneous and exaggerated conclusions are frequently drawn from the result of novel experiments. When we get any thing new, he says, we are sure to plant it on the very best land and take the best care of it, and the product is too frequently compared with others, without a due allowance for these circumstances.

In his estimate of the two potatoes, the Editor of the Cultivator fully concurs.

A Mr. Grove also, in the last number of the Albany Cultivator, adds his testimony against the value of the Rohan, both with regard to quantity and quality. He prefers what he calls the "Merino, a flesh colored long potato."

FENCING.

Mr. Editor,—I was very much pleased with the description of your correspondent S's mode of constructing his stables, and am resolved to follow his example as soon as circumstances will permit. I think I can suggest one or two improvements upon his plan, but of that hereafter. My present object is to say, that the mode he recommends for securing the ground end of his posts from rot has been adopted by me for my fencing posts for several years. I was induced to resort to it from a statement made me by a northern gentleman to this effect. He informed me that his grandfather, who was a very eccentric and particular man, kept an exact diary of his farming operations, from which, he found that some white oak posts, which, upon being moved, were found perfectly sound under ground, had been set more than thirty years. A detailed account of the mode of operation was given in the diary, and it corresponds exactly with the method recommended by your correspondent, viz: charring and pitching.

A very important subject sir is this of fencing, as to the best and cheapest mode. Much certainly will depend upon situation, and I believe it has generally been conceded that in a thickly timbered country like Virginia, the worm fence is the *cheapest.* This I hold to be a great mistake, for, whilst it is certainly not so pleasing to the eye, I think it costs half as much again as a post and rail fence, made in a proper manner. It is all important in a fence of this sort that the post, in which so much of the labor consists, should be of durable material. If you have locust or mulberry, or even cedar convenient, no artificial preparation is necessary; but if not, I believe a little labor in using the burning and pitching process will render common white oak equal to either. Now sir, if you can get durable posts, the chief labor of your fence is done, once for all. My plan is to take such posts, and under cover, in rainy weather, I set my hands to morticing. This is done by flattening two of the sides with a broad axe, which is the work of one hand, most accustomed to the use of the tool. Two others are employed in laying off and boring holes with a two inch auger, and a fourth uses a very long narrow axe, that I have for the purpose, in removing the wood between the holes, every two of which are, of course, bored close together to form the mortice. It is surprising what skill will be readily acquired in the use of the morticing axe, and with what facility the mortices will be made with a little practice. I generally use white oak trees, split up into triangular posts, about five inches on the back or narrowest side. If the fence is intended for the bank of a ditch, I cut four mortices about a foot apart—if the fence is to be put up without a ditch, six mortices may be required, disposing them so as to make the fence close enough at bottom, whilst the upper part may be left more open. The usual rail is flattened and slipped into these mortices, and I have my fence complete.

Now let us compare this neat and substantial fence with the unsightly *worm* that usurps its place in our country generally. I use to a pannel six rails and a post, instead of ten rails, a rider and two stakes: so that I have a saving

of five rails and two stakes to offset the cost of my post and setting, When you consider the labor, proverbially great, of splitting rails, and the serious expense of hauling them, you will find that it will more than counterbalance all the expense of the post. Remember too that the chief labor on my post is done in the winter, during wet weather, when the hands can be doing little else, so that in the spring, when my fencing is wanting, it is all ready to go up. I have not estimated the additional quantity of timber that is required to surround a plantation with a crooked fence over a straight one, nor have I yet adverted to the ground that is not only lost in the corners of such a fence, but which becomes an eye sore from the weeds with which it is frequently overrun.

There are several other advantages in a post and rail fence, which will be obvious to the farmer, but would be tedious to enumerate. But if sir any of your readers feel inclined to make the experiment, they shall have any additional information upon the subject I am enabled to give.

Your obt. servant, H.

If any of our readers desire it, they can procure a morticing axe such as is spoken of above by calling on the Editor of this paper.

The following is from the pen of an experienced medical friend and one entirely to be relied upon.

Mr. Editor,—It was with much pleasure I saw your correspondent "M." recommend the clyster pipe as a mode of administering medicine to the horse. I would suggest to those, who will not provide themselves with such an instrument, that a very good substitute may be formed by securing a smooth hollow reed to the end of a common bladder, filled with the injection. My own experience leads me to confirm the opinion of "M." that it is the best mode of physicking all animals. The mash is uncertain, and is always unavailable, when, as is most frequent, the sick animal loses his appetite. I myself have been, on one occasion, an eye witness to the fatal effect of the common practice of *drenching*, and have heard of several others in which the lives of the most valuable animals have been sacrificed to this dangerous custom.

The above sketch is intended to illustrate the difficulty that may, and sometimes does, occur in this mode of administering medicine.

The engraving represents a longitudinal section of the horse's head and neck, the parts as marked above. Now, the horse, like all other animals, receives food into the stomach through the passage (*d*) the gullet, which lies back of the windpipe (*c*) leading to the lungs. So extremely sensitive is the coating of the windpipe, through which the animal breathes, that the presence of any extraneous matter produces great irritation and frequent death. To guard against such an occurrence, the upper end of the windpipe is protected by a lid (*b*) attached to the the tongue, which acts as a valve and closes the windpipe, whilst the food passes over it into the gullet. Now, when the horse's head is thrown up, and an attempt made to force a distasteful draught down his throat, in his struggles to resist it, it is possible, that the valve may be raised and the contents of the drenching bottle emptied into the windpipe.

We see here the danger of the practice, not uncommon in drenching, of drawing out the tongue, which has a tendency to raise the valve with which it is connected; also, the injury that may result from stroking or pinching the throat of the animal, an expedient frequently resorted to to make him swallow; the tickling sensation caused by this operation may induce him to cough, whereby the valve is raised.

When it is absolutely necessary to drench, I think it very possible, that an elastic tube might be affixed to the mouth of the bottle, long enough to pass over the epiglottis or lid into the gullet, whereby all danger would be avoided.

PLANTING CORN.

As the season for corn planting is approaching, we copy the following valuable hint from an old paper.

One of the most important improvements, introduced by scientific farmers in the culture of this very important crop, within a few years, is the planting of from four to six times the usual quantity of seed; and, at the first hoeing, pulling up all but the proper number of plants, leaving the best and most thrifty ones to form the future crop. Experiment has shown the great advantages resulting from this course, if confidence is to be placed in the reports of our most successful farmers, upon this subject; or if science and the laws of analogy are to be trusted in this, as well as in other cases. Every farmer must have seen the difference in the size, ap-

pearance and thrift of the corn plants, in the same hill. What farmer would undertake to breed indifferently from a healthy, or a sickly race of animals? Why not apply the same principle to vegetable productions?

The additional quantity of seed, recommended in the culture of this crop, the expense of which is but trifling, enables the husbandman to select the healthy plants only, for the crop, removing all the sickly ones, and with them, the danger, if any exists, of communicating disease to such as remain. Within a few days, an intelligent farmer who had seen the experiment tried, expressed to us the fullest belief, that this improvement in planting had added one fourth to the quantity and value of his crop.

As we know that some of our readers look down with scorn upon humble prose, we enforce the injunction of plentiful planting on them, by subjoining the metrical reply of an old farmer to the question, how many kernels he put in a hill, which was as follows:

One for the blackbird,
One for the crow,
One for the cut-worm,
And two to grow.

THE INFLUENCE OF CULTIVATION ON VEGETABLES.

There appears to be a permission from nature to effect certain changes in vegetables, whilst she retains an inherent property in the plant to revert to its original creation, which is manifested by their tendency to *run wild* as we call it. To satisfy ourselves that the productions of the vegetable kingdom are greatly obedient to skilful cultivation, we have but to compare a cultivated field with a neglected common of the same soil, and in a situation exactly similar; or to take some of our most common vegetables and ask of nature to show us a native grain like wheat, a native fruit like the apple, a native bud like the cauliflower, or a native root like the potato—we should ask in vain, for it is by means of the observations and discoveries of successive generations, and the application of those discoveries in such a manner as to make each one an improvement on the one before it, that men have been able to cultivate the *cereal grasses* into wheat, rye, and barley, which are now the bread and the drink of so many millions. In the same manner, by cultivating the apple, the pear, the peach, the plum, and countless other fruits, we have been able to turn the original design of nature in maturing seed, and rendering this operation secondary to the growing of a repast for us.

We have taught the *cruciferæ*, (or cabbage tribe) having four petals in their flowers, to linger in the bulbs of their stems, their leaves, or their flower buds, and there form for us stores of provision, and we have educated some varieties of the potato out of the habit of bearing flowers altogether, and other plants out of the habit of maturing seed; and by skilful culture we have converted the dahlia and many other plants into double flowers, which in their natural state had but one row of petals, and have so improved their size, and beauty, and number, that the *flowers* have ceased to be *flowers*, whilst they have become the highest ornaments of our gardens.

I propose, Mr. Editor, to treat hereafter of the means that have been used to effect these changes, as well as of the physiological laws of vegetables upon which these means have operated, if you should think the above remarks entitled to a place in the Planter.

A NATURALIST.

C. T. BOTTS, Editor of the S. Planter.

We shall be very happy to hear farther from a *Naturalist*.—ED.

PROFITS OF FARMING.

The profits of farming have been, at best, considered doubtful, whilst many have been used to look upon it rather as a means of spending a fortune, than of making one. This we have long considered a great mistake, and having known a gentleman, who, by farming alone, had realized a handsome independence from a very poor piece of land, in the county of Hanover, we applied to him for an explanation of the fact, that he had so signally succeeded at a business, which in his part of the country is generally considered an unprofitable one. After some hesitation arising from that modesty which is characteristic of him, Mr. Edmund Winston, the gentleman to whom we allude, consented that we might inform the public that he commenced life, 20 years ago, with a paternal estate of 150 acres of very poor land, and eleven hundred and seventy dollars in money. Since that time, Mr. Winston has realized from farming an increase of property, which he estimates at $30,000, but which his neighbors rate much higher; having, in the meanwhile, by the same means, raised and supported a considerable family in the greatest comfort and respectability.

Mr. Winston states that whilst the amount was something smaller, he had no difficulty in clearing ten per cent. per annum on his capital, over and above the support of his family, and that even now, he certainly clears at least 7 per cent. on the whole amount.

When we asked Mr. Winston if he was aware of any peculiar cause to which he could attribute his success, he declared that he knew of nothing except that he always attended strictly and industriously to his business, being always the first at his stables in the morning, and the last at night. He thinks that the same

consequences will always result from the same course, and that there is no difficulty with industry and management in securing an independence even upon the poorest land. This he thinks can be effected by industry alone, and with the knowledge he now possesses, he thinks he himself could have done much more than he has done.

Mr. Winston is now certainly acknowledged to be a most judicious practical farmer, whose opinion, not less than his example, will be potential where he is known, and we venture to promise our readers some rich treats from information gained from him.

There is one thing we must never forget in estimating the profit of farming, the security of the invesment. The business may be slow; that is, there are many speculations, many varieties of trade, which, if they are successful, will make a fortune sooner than farming, but no man at this business, with industry and attention can fail to make a support at least, whilst the *quicker* modes, be it remembered, people the world with bankrupts. We venture nothing in the assertion that of an equal number of farmers and traders, taken for a series of years, the sum total of the gains of the former class will greatly exceed those of the latter. If it be certain then, that the industrious farmer may be sure of independence, and need entertain no fears of the result of his venture, how much of ease and contentment, health and happiness, does not this single fact secure him. What an advantage it is to be relieved from the sleepless nights and watchful vigils of the anxious speculator, whom an hour's news may place on the pinnacle of wealth, or sink into the abyss of poverty.—There is no life so cheerful, so healthy, so independent, or so ennobling, as that of the FARMER.

LIQUID MANURES.

Mr. Editor,—I send you the following extract from an old number of the Baltimore Farmer and Gardener, because I have tested the value of both the soot and soap suds therein recommended, and know of no suggestion so simple, which is at the same time so beneficial. My name, if required, is at the disposal of your readers. O.

"In the preceding volume of this work, page 134, there is a very interesting article on the propriety of using liquid manure for purposes of horticulture; a solution of soot and water is therein recommended, in the proportion of six quarts of the former to a hogshead of the latter. This mixture has been found to exert a most salutary influence on *Peas*, *Asparagus*, and a variety of other vegetables to which it has been applied. We do not doubt the fact stated, and would here observe, that the *soap suds* made in a farmer's family, which is mostly thrown away, is one of the most effective manures that can be applied to vegetables and flowers of all kinds. From an experience of several years, we can testify to its invigorating effects, and recommend its use with confidence. There are but few families, anywise extensive, who do not make a sufficient quantity of this article, in the course of the year, to keep a garden of tolerable size, not only in good condition, but rich enough to secure good crops of vegetables."

SEED WHEAT.

February 19, 1841.

My Dear Sir,—My own experience confirms the value of Mr. Taylor's recommendation (published in your first number,) to permit seed wheat to remain until it becomes thoroughly ripe.—My wheat crop has been entirely free from *smut* for the last eleven years, whilst my neighbors, in many instances, have complained much of it. I know of no difference in our cultivation, except, that I never plough or sow my land, when it is the *least* wet. Uniform experience has proven the injurious effects of such a practice in a clay soil. But I always reserve my seed wheat, which is the most forward, until the crop is out, and then gather it after it has had time to become thoroughly matured, taking care to do so before the dew is evaporated on account of the *shattering* to which the very ripe wheat would otherwise be subjected. It is, however, but just to add, that my crop suffers occasionally from the ravages of the fly.

Your obt. servant,

JAMES MCILHANY.

C. T. BOTTS, Esq.

The above is from a member of the Va. Senate and a gentleman well known in his own county (Loudoun) for his successful farming. We should be very much pleased if we could induce our correspondents generally to follow the excellent example set them by Mr. McIlhany, and discard that false delicacy which induces them to withhold their names from their communications.

AMERICAN SILK.

The Macon Intelligencer states, that at the late court term of Macon county, Georgia, one of the Judges, A. E. EARNEST, Esq. appeared in a *full suit of silk* (including coat, pantaloons, stockings, pocket handkerchief and stock) produced and manufactured wholly and entirely in his own family. Judge E. is of the opinion that domestic silk will, before many years, be found the most economical article for negro clothing, as well as for ladies and gentlemen. When such examples become common, we shall have hopes for our country.

FLOWERS.

Some one has observed, that the cultivation and refinement of a people may be measured by their devotion to flowers. They are the holiday garb of nature, and there is certainly something very refined and elegant in their cultivation.

To watch the rapid bursting of a little seed into the full blown flower, with its freshness, its fragrance, and its gorgeous dyes, is, as it were, to enter the magic show box of nature. No amusement more befits the farmer's wife, the farmer's daughter, or the farmer himself, than the cultivation of flowers. It is therefore with much pleasure that we copy from the Farmer's Cabinet the following excellent directions for rearing one of nature's greatest favorites.

THE DAHLIA.

Sir,—I find in the Magazine of Horticulture an article on the management of the Dahlia, which is deserving the notice of those who are interested in the cultivation of the most superb of all the flowers which adorn our gardens, at that season of the year, when the beauty and bloom of the spring and summer varieties have passed away. It is there stated, "that the best general bloom is always to be found upon those roots which are planted on a moderately rich, sandy loam soil, in a cool situation, as in hot and dry seasons they do not suffer so much from drought, as those planted upon a gravelly or sandy bottom. Planting the roots on a proper soil near the margin of a river, or other large body of water, seems best adapted to insure a perfect blooming of this exquisitely formed flower; the constant evaporation from the surface in hot weather, producing a humidity in the atmosphere, much more congenial to the nature of the plant, than can be obtained by any artificial means." As an instance, mention is made of Thorburn's garden, which is situated on Long-Island, opposite Hurlgate, and within about twenty feet of the waters of the East River, where the Dahlia has not failed for several years to produce an abundant bloom; while in the interior, cultivators have, in many places, been unable to obtain a hundred flowers from as many roots; and from my own observation, the remark is just, for the best blooms which I witnessed the last season were in situations similar to that pointed out on the Delaware, in a garden reaching to within a very few feet of the river, and on the banks of the Schuylkill, every plant being loaded with blossoms of the most perfect form and delicate varieties, of remarkable freshness and vigor; while on other plantations, more remote from water, where the plants had grown to an enormous size—more like trees than plants of annual growth—scarcely could be found a single well formed flower, with numerous buds which never opened at all.

I have an idea that a great improvement in the cultivation of this most valuable addition to our autumnal flowering plants might be made, by placing each root in a large pot, instead of into the border of the garden; there would, I conceive, be many and great advantages resulting from this practice. And, first, the roots may be committed to the earth much earlier than would be safe, if they were planted into the border at once, as the pots could be kept under shelter—a piazza for instance—until the plants had shot forth, and then be plunged into the borders, pots and all, to remain during the flowering season; this mode being as applicable to those plants stuck in pots in the green-house, as they could be removed to large pots most conveniently. Second, at the approach of winter, the pots could be removed from the border into the piazza, or into the house, or other shelter, where they might continue their blooming, and bring many blossoms to perfection which would otherwise be cut off by the frost, or be prevented from opening at all if exposed in the borders. Third, a proper soil might be prepared artificially, so as to suit the different sorts of flowers, it being found that the mottled varieties require a gravelly soil to bring forth their beauties: and others doing better in those soils that are tenacious; and in these pots the roots might remain during the winter, if found better adapted to their safety than taking them out; it is presumed, however, that in either case, it would be advisable to replace the earth with fresh mould at the time of planting the roots in the spring, and this could be prepared during the winter, by exposure to the atmosphere and agitation, the grand secret of preparing mould for the potting of plants of every description. D. E.

NEW AGRICULTURAL IMPLEMENTS.

Mr. J. F. Schermerhorn has called upon us, within the last day or two, for the purpose of bringing to our notice two agricultural implements lately invented by him.

The first is called the CYLINDRIC TILLER AND PLANTER, and is very handsomely figured in a late number of the New York Mechanic. It consists of a frame, in which is fixed a cylinder 7 feet long, with twelve rows of iron teeth, nine inches in length, which are intended to cut up the soil in the revolution of the cylinder; behind this cylinder is placed a shaft with *spiders*, upon which, it seems, the sod, raised by the teeth of the cylinder, is intended to be thrown, and, in its revolution pulverized. Back, again, of the spider shaft is placed some one of the many planters or sowers, coverers, and rollers, now in use.

The cylinder is designed to do the work of the plough, the spider shaft of the harrow, and the whole, drawn by three horses, is intended to complete, at once, the several operations of ploughing, harrowing, seeding, and rolling.

We incline very much to improvements, espe-

cially in agricultural implements, and we would wish to speak with diffidence of a machine we have never seen in operation, which we may possibly misconceive, and undervalue.

The inventor designs it for the prarie lands of the west, but thinks that it will work well on the old level land of the Eastern States. That there may be lands so light and friable that three horses can work up six or seven feet in a breadth may be possible; but we do not think we have ever seen such, in any tolerable body. It may be however, that Mr. Schermerhorn, in getting rid of the friction of a mould board, which has been shown to be a large proportion of the labor of ploughing, may have greatly increased the efficiency of his team; if so, and the work is effected as perfectly as with the common plough, there is no telling the extent to which he has benefitted the agricultural community. We think, under any circumstances, Mr. Schermerhorn will find that the planting, covering, and rolling, had better form the subject of a second implement; for whilst, to us, who have served a long apprenticeship to mechanics, the combination presents no difficulty at all, yet we have generally found that separation, rather than combination, which to them is complication, was most desirable for the unskilful hands in which farming implements are commonly placed.

The second invention of Mr. Schermerhorn is designed as a mode of applying other than human power to the common art of DITCHING.

A particular description of this machine would occupy too much of our space; suffice it to say, that the earth is removed by a scoop made of boiler iron, a quarter of an inch thick, two feet and half long, the shape of the ditch to be cut. This scoop, armed with thin knives is drawn easily through clean land, (for like the tiller it is only designed for such) by three oxen, until it has traversed its own length, when a perpendicular cutter descends in front, and divides the earth. Then the scoop and its contents are raised by a compound lever, to which three other oxen are attached, and the earth in the scoop by a proper apparatus is deposited on the side of the excavation, about ten inches from the edge, when the scoop returns to the hole, to be again drawn forward by the three first oxen..

This machine has been actually worked in the presence of a committee of the United States Society of Science and Mechanism, in N. York, who make the most favorable report of its operation. They say,

"By this machine was made the most perfect and complete ditch and bank, your Committee have ever seen. The ditch was four feet at the top, three feet deep, and one foot at the bottom. The bank was just the reverse of the ditch, being four feet at the bottom, three feet high, and one foot at the top, and which together, must make a very good and efficient fence for the prairies of the west, in which we understand this machine is more particularly intended to operate.

"Your committee do not hesitate to recommend this machine to the public, as one of real value and great utility, for its simplicity, durability, cheapness, facility of working, and keeping it in order, (which will not be much more than to keep a plough in order) and in their opinion, far exceeds any thing of the kind, that has been brought into use. Your committee are of opinion, that six yoke of cattle and three or four hands will be able to make from fifty to eighty rods of ditch and bank in a day."

Mr. Schermerhorn deserves great credit for the ingenuity displayed in the invention of these machines, and we hope he will eventually reap from them something much more substantial.

We shall be extremely pleased to hear from the practical operation of the TILLER, and from Mr. Schermerhorn himself, who seems to be devoted to the cause of agriculture, a communication will at all times be acceptable.

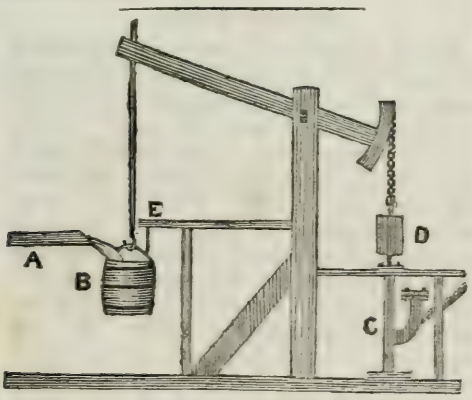
SUGAR BEET.

Dr. W. S. Morton, in a very sensible address delivered before the Cumberland Agricultural Society in Nov. last, recommends strongly the culture of the sugar beet. He says:

"The turnip, which in the moist climate of Great Britain, has done so much for agriculture, will rarely succeed here. Our climate is too liable to drought in the fall season for this root; but I can most confidently recommend the beet. I have been cultivating this crop for stock, on a small scale, for some seven or eight years, and have never experienced a failure. My best crops have, however, been invariably produced in the driest years. I believe that six or eight times as much food for cows, sheep, or hogs, may be produced from the same quantity of land in this crop, as in any other that I have ever tried. The kind which I greatly prefer, is the white Silesian sugar beet; it withstands cold much better than the mangel wurtzel, and I believe is more nutritious. I received a few seed in the fall of 1836, from my friend Mr. Ruffin, of Petersburg, and have scattered them largely since; with what benefit to my friends I cannot tell, but to myself, I consider them almost indispensable. I believe that no man, who would provide a plenty of beets or pumpkins to feed his milch cows for one winter, could be satisfied without them afterwards. The recommendations of the beet as food for stock, in our agricultural journals, are so strong and so respectable, as to render a refusal to try them, by those who love economy and comfort, quite inexcusable. Their product is prodigious on the richest land, and they are well worth cultivating

on that of medium quality. If the introduction of turnip husbandry into England, is considered there the greatest era in their agricultural history, we may well be thankful, that a root, much richer and more productive, is found so well adapted to our arid country. There are two things specially to be attended to in its culture. The soil should have a clay substratum, and the land should receive a thorough winter or fall ploughing, to destroy insects. I lost every young beet on three-fourths of the land planted last spring, from neglecting to plough in the fall. I made out a fine crop, however, from transplanting."

Hogs.—Dr. Morton also, in the address above alluded to, states, that he has great reason to complain of an unnatural but not uncommon habit prevalent amongst his sows, that of destroying their own pigs. This he entirely remedied by simply providing them with the greatest possible variety of food; and also, by furnishing them with, by way of condiment, occasionally, a little salt, sulphur, rotten wood, charcoal, &c.



The plan and description of the machine represented in the engraving is copied from the Domestic Encyclopedia. It is a simple and valuable contrivance for making use of the power to be derived from a fall of water, when that power is too insignificant to justify the erection of a common water wheel.

There are a variety of purposes to which it may be applied, and it is adapted to any situation where there is a constant stream of three or four inches, and a fall of five or six feet. The engraving represents it as used in working a forcing pump for the purpose of raising water.

A is a pipe, two inches in diameter, through which the stream is made to flow in such a direction as to fall into the bucket B, when the latter is elevated; but as soon as it begins to descend, the stream passes over it and flows progressively to supply the wooden trough or well in which is placed the forcing pump C, three inches in diameter. D is a large wooden tub or cylinder, which is filled with stones, bricks, or other convenient matter, and should weigh about 240 lbs. The bucket is suspended to the long end of the beam, and is so placed that its weight when nearly filled, shall overbalance the weight of the cylinder D, which of course will cause it to descend.

At E is fixed a cord, which, when the bucket approaches to within 4 or 5 inches of its lowest projection, is extended and opens a valve in the bottom of the vessel through which the water is discharged, when the weight of the cylinder D again preponderates, and the bucket is brought up to catch the water again. The frame and other parts are too clearly delineated to need explanation, and the whole cost, without the pump, cannot exceed fifty dollars, made in the best manner.

This engine was first erected at Irton Hall, in England, and there applied to raising water for purposes of irrigation, which is there considered of immense benefit, especially to meadow lands. It has been sometimes resorted to, and it is said profitably too, at an expense of thirty pounds sterling, ($133 33) per acre. This mode of raising water is certainly more economical and more manageable than that of wind mills frequently recommended.

By substituting a pestle and mortar in the place of a piston and pump, we have known it applied with great advantage to the pounding of corn into fine hominy, for feeding, which it will do most effectually.

There is hardly a farm in Virginia on which a stream cannot be found fit to drive this simple machine, and there is no farmer that ought not to be perfectly prepared to erect it without going off his plantation. There are many purposes to which such a constant acting power could be applied, that would pay the cost of erection with usury. It will work while you are asleep.

For the Planter.

THE VALUE OF COMPOST.

No point of economy and management is perhaps more worthy of attention, and none probably so utterly neglected by the farmer of the south, as that of preparing and increasing the manure heap. It is indeed the raw material from which he manufactures his products, and the cotton manufacturer, who would fail to procure sufficient raw materials for the supply of his looms, would be about as wise as the farmer who neglects his compost.

A circumstance, that occurred to the writer of this article, may serve somewhat to illustrate this position, and may be considered not altogether unworthy of note.

Some years ago, in the division of a large hereditary estate amongst several legatees, of which I was one, it happened that there were an

old negro man and his wife among the slaves, who being considered chargeable, a question arose as to the disposition to be made of them. Moved by the consideration of their being old and faithful family servants, I offered to take them and provide for them. Of course no opposition was made, and I carried them home.

To make the most of a bad bargain, I purchased an old horse and cart, and made it the sole duty of the old man, with his horse and cart, to deposite on the manure pile the leaves of the forest, which it was the business of the old woman to collect together for him on every good day. The plan, thus resorted to from necessity, proved infinitely more productive than I had ever calculated on, and I entertain very serious doubts, whether any two hands on my plantation were ever worth more to me than this *chargeable* old man and his wife; that is, I mean to say, that the result of their labors was perhaps more beneficial than that of any other two hands on my plantation. Now Mr. Editor, how many *chargeable* negroes are there in Virginia, that might be as advantageously employed?

Mr. Editor,—There is much in a name, and hereabouts, we are not altogether satisfied with the one you have adopted. If you will pardon the liberty, I would suggest one that we think would be more appropriate to your design and the character of your valuable little work. As you propose to skim the agricultural periodicals of the day, and serve up the proceeds in your paper, suppose you had called it the AGRICULTURAL CREAM POT.

A little club, of which I am a member, have been talking the matter over, and thinking the title very appropriate, we hope that even now you will adopt it. Yours,

HANOVER.

We publish the above, partly because it is complimentary, and partly because it affords us an opportunity of saying a word or two upon the size of agricultural papers. We have been cheered in our short career by much more of compliment, both in public and private, than we had any right to expect from our humble undertaking, and we have received support and encouragement which we know has been elicited rather by approval of the plan of the work than any merit of ours in the execution. We are happy to say that we have heard but one objection, except to that of our name. Some of our correspondents have complained that our sheet was not as large as some other agricultural periodicals. It is true, but who ever heard, as our "Hanover" friend would say, of a cream pot as large as a milk pail?

We hope we will not be considered guilty of the indelicacy of drawing an invidious comparison between ourselves and others—nothing is farther from our thoughts; we only mean to say, that we started with the design of performing for the farmer a very laborious monthly job, viz: that of extracting and condensing into a small space the sum and substance of the agricultural productions of the day. When it is considered how much of those journals are occupied with matter foreign to our climate and soil, it will readily be seen that, if the work is well done, it must of necessity occupy but little space, the very object that we thought desirable to the agricultural community; but if we were mistaken, and if our subscribers continue to increase, and demand more paper, they shall have it with pleasure. For whilst the expense of publishing a large paper is rather greater than a small one, the labor is much less: since, it is much easier to tell the printer to copy an article, than to study and condense that article for your readers.

Still, there is reason in every thing, and we frankly admit that our present sheet is not as large as we should like to have it even according to our own views, and nothing shall keep it long at its present size but a want of patronage, which, from present appearances we have no sort of reason to anticipate. Will the farmers of the country, who are pleased to see such an attempt made, and we know there are thousands such in Virginia alone, will they take an active part for us, using a little exertion to obtain us subscribers? Subscribers themselves may rest assured, that every additional subscription they will obtain for us shall redound to their benefit, as we design and expect, for a long time at least, to lay out every cent we receive in enlarging and improving the paper. We are devoted to it, heart and soul, and nothing but apathy or indifference upon the part of the community it is intended to benefit, shall prevent its successful progress.

As to the suggestion of our correspondent, the name he proposes so well expresses our design, and when properly understood, is so entirely free from arrogance, inasmuch as it signifies nothing more than a gleaner of other men's fields, that we have half a mind to adopt it. The Cream Pot—there is no mistaking or confounding it with the numerous Farmers and Planters that are rife in the country—we like it hugely, and if we did not flatter ourselves that we were already extensively known as the PLANTER, we might possibly consent to become the "CREAM POT."

Broom Corn—how introduced.—A lady in Philadelphia held an imported clothes whisk in her hand. Whilst examining it as a novelty, Dr. Franklin found a single grain attached to the stalk: this he planted, and a large and increasing article of usefulness has been thus perpetuated in the United States.—*Nat. Int.*

LIME.

The value of lime as a fertilizer, is too universally acknowledged, to need any exposition at this time. The greatest difficulty is the cost of the article, and as we apprehend, that to many who have ready access to the unburnt lime, the cost of burning is still a heavy item, to them we recommend the following method of effecting this object, taken from the American Farmer. We think it probable that no mode calculated for general use, would be more effectual or more economical.

To burn lime, get if you can, three large logs, say two feet in diameter, and of any length according to the quantity of shells to be burned, place these logs on the ground, parallel to each other, at the distance of two feet apart. Thus, three logs, with their two intervening spaces, each of two feet width, will make a base of ten feet wide. On that foundation, the shells will rise as high as they can well be pitched up. Between the three logs, in the spaces each of two feet width, pack as much brush and rubbish wood as you can, until these more combustible materials rise to the height of the logs. Then throw up shells as long as you can get them to lie on one another. The apex of the heap of shells will be as high as it is convenient to throw them, until rolling down they will fall over the sides of the outside logs. Set fire then to the brush, and the heat, radiating upwards, will completely burn the whole mass of shells. As the mass begins to sink at last in the centre, the shells which had rolled down to the outside of the logs, may be thrown up, to be more completely burned. It is said that a kiln, made in this way, 18 or 20 feet long, will burn about 1000 bushels.

GAINSBOROUGH'S HUSKING AND SHELLING MACHINE.

A machine under the above title is much lauded in a communication to the last American Farmer. It may be had of Messrs. Sinclair and Moore, Baltimore. We have made a memorandum to enquire more particularly into its merits without any very sanguine expectation of being highly gratified.

PORTABLE SAW MILLS.

Two are very highly spoken of in the last Farmer; one, the invention of a Mr. Geo. Page, of Baltimore, and the other described in a letter from the inventor, Col. Hamilton of N. York, himself. The modus operandi of neither is fully explained, and we are constrained to admit that our doubts of the practicability of a good portable saw mill, to be worked by animal power, have not been removed by any thing we have yet seen of either of these machines. We should be glad, however, to learn more upon the subject, because such a thing is a great desideratum to the agricultural community.

POUDRETTE.

Although some contrariety of opinion exists as to the value of this article, its convenience and powerful action seem to be universally admitted. We expect soon to make arrangements to procure it as it may be wanted by our friends, and invite them to make experiments for themselves. When we obtain it, we will give full particulars of price, mode of using, &c.

We have been requested to copy from the American Turf Register for January and February 1839, the following remedies for the grubs and colic in horses, which our correspondent, a gentleman of great experience and sagacity, says that he has used with signal success.

To cure the grubs. Take 1 pint molasses, 1 pint new milk and one ounce laudanum; put these ingredients in a bottle and after shaking it thoroughly, administer the dose. In half an hour afterwards give the horse a pint of castor oil and he will soon discharge the grubs.

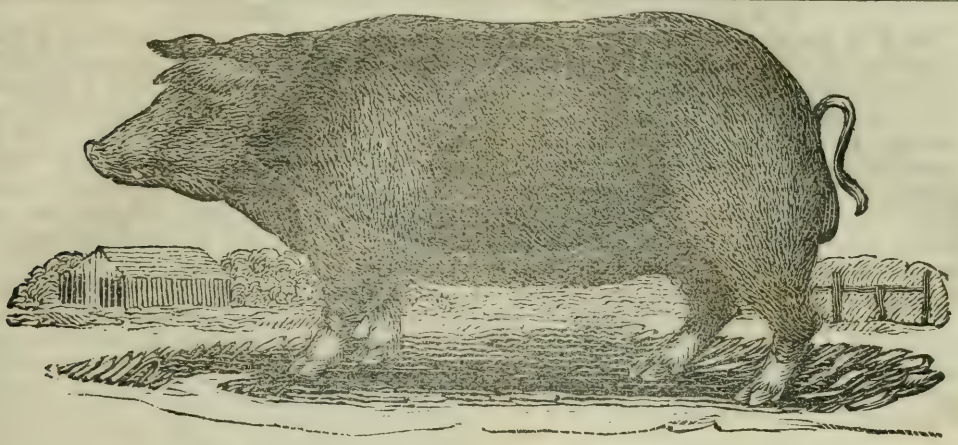
I have never failed in a single instance, of curing a horse attacked by the grubs, if they had not eaten his maw.

To insure a horse against grubs, the dose above mentioned should be given spring and fall.

To cure the colic. Take four large onions and beat them in a spice mortar until you have them well bruised; then add a pint of whiskey and strain the whole through a piece of linen—give the dose. It will relieve in 20 minutes. When a horse has the colic it may be readily seen from his swelling.

HESSIAN FLY.

In opposition to Miss Morris' theory, published in our last, a writer in the Cultivator from Hamburgh, N. J., asserts that he made repeated experiments by sowing patches of wheat in the open ground, and other parcels on cotton under a glass, about the middle of September. Upon examination, on the 25th of October, he found by the aid of a microscope, nearly every plant that grew in the lot perforated near the top of the ground, and containing from three to eight eggs or nits each, whilst those taken from the cotton had no perforation nor nits about them. From that time, which was eighteen years ago, he states that he has delayed sowing his wheat until October, that the frost might kill the fly before it had an opportunity of depositing its egg in the tender plant, and the consequence has been, that since that time, he has not been troubled with the Hessian fly.



We have here a portrait of a very fine Berkshire Boar, the property of the Rev. Jesse Turner of this vicinity: the likeness was drawn by the portrait painter, Mr. Petticolas, and engraved on wood by Mr. J. B. Martin of this city. Although we do not think the painter has in some respects done full justice to the animal, this we will say, that it is rather more like a *hog* than some pictures we have seen lately, that were intended to represent that interesting brute. Mr. Petticolas, although standing very high as a delineator of the human countenance, and remarkable for the style of his painting, is not a *professed animal* painter, and is therefore not perhaps aware what parts the rule of the profession require him to enlarge and what to diminish, to please the improved taste of the public for that old fashioned animal. He has been living in retirement for some time, and strangely imagined that it was his business to furnish something like the animal whose portrait he was employed to draw; and the Parson too, in the simplicity of his heart, seems to have fallen into the same error. The consequence has been, that, between them, we have a picture of a very fine animal very well engraved, that must be universally condemned; for it is certainly as like any thing else as the fanciful and unnatural representations we have lately had of the improved Berkshires, where the painter seems to have taken a mode as the beau ideal of a hog. And yet we are credibly informed that this amimal, which was purchased by Mr. Alex. Shelton of this city from Mr. Bement of Albany, is a thorough bred Berkshire, of the most superb form and appearance. Indeed, a gentleman who takes great interest in such matters, authorises us to use his name in saying, that he has visited the most celebrated stocks of hogs to the north, and that he has seen nothing superior, scarcely any thing equal, to this boar. Mr. Shelton says that nothing but the objection to breeding in and in would have induced him to have parted with him for three times the sum of $50, for which sum he was sold. The boar is purposely kept in only moderate order, as he is represented, and is estimated to weigh, in his present condition, about 400 lbs.

We are much indebted to the enterprise which induced Mr. Shelton to introduce so fine an animal amongst us. His stock is widely disseminated, and has obtained great reputation, so that Mr. Shelton has some difficulty in supplying the demand.

These pigs are sold at $20 a pair, and we freely offer our services in procuring them for any of our country friends.

SYSTEM.

System is as essential in farming as in any other occupation of life. Let the farmer, therefore, who has never reduced his methods to order, commence now; let him examine his farm, make a map of it, number each field, and having provided himself with a memorandum book, (a few sheets of paper doubled will do, if a better one cannot be had,) and a regular debt and credit kept with each field. Charge to the field the manure, labor, seed, &c., and credit to it the crop taken from it, whether of grass or grain. It is only in this way that any thing like an estimate of profit or loss can be correctly formed. In another part of your book, enter in separate columns all the cash received or paid out by you. Look it over occasionally, and see if any purchases have been improvidently or needlessly made. This will be particularly necessary, if you are in the habit of purchasing articles on credit, one of the very worst practices in our opinion, into which a farmer can fall.

STEAMING.

Mr. J. D. Lowndes of this vicinity has kindly called upon us to say, that he has for some time been using a very simple apparatus for steaming, which he finds extremely economical and convenient. He has a cast iron pipe, somewhat of a semi-circular shape, the two ends of which go through the outer wall of his kitchen chimney into a hogshead of water. The heat of the kitchen fire causes a circulation of water through the tube, by which the whole mass is heated in an inconceivably short space of time.

By means of this simple and ingenious contrivance Mr. Lowndes saves both the fuel and trouble of two fires, and has hot water for steaming, or other purpose, whenever his kitchen fire is burning.

HARRISON BEEF.

We see by the Leesburg Washingtonian that a pair of mammoth bullocks, entirely white, raised by Mr. R. L. Wright, in the county of Loudoun, were sold in the city of Washington, in anticipation of the crowd on the 4th of March, for the round sum of five hundred dollars. So that Virginia has the honor not only of having given birth to the President elect, but also of having furnished the beef for the inauguration. Encouraging this certainly to Virginia breeders.

PROTECTION FOR PLANTS IN WINTER.

We are warned in a late number of the Maine Cultivator from using *straw* to cover tender plants during the winter months. It is not, they say, so much the cold of our winters that destroys tender roots, as the wet that is suffered to freeze into ice about them. Our common pine boughs, frequently used for the purpose, are probably much to be preferred, since being more compact, they are less absorbing and turn the water better.

PEACH TREES.

A communication in the last number of the Farmer's Cabinet, signed B. H., asserts that the decay of the peach tree, is, in a great measure, owing to the practice of grafting, whereby an imperfect union takes place; sickly growth is the consequence, and the diseased tree is then rendered vulnerable to the attacks of the worm, which completes its destruction. He recommends strongly the practice of planting out, every year, a row of the seeds of the finest peaches to be obtained in the market, and pruning them in their places, until they produce fruit, at which time those of inferior sorts could be grafted, and others of fine flavor, might be permitted to remain, with the expectation of their retaining health and vigor for many years to come. Peaches of the finest flavor may be obtained from trees the third year, by planting the stone, without grafting or budding.

RECIPE.

To make a plaster which will relieve the breasts of a nurse, hardened and inflamed by cold.

Melt together 8 oz. mutton suet, 4 oz. beeswax, and 4 oz. rosin. Add to them whilst on the fire, a gill of linseed oil and half a gill of sweet oil. When cold, it is fit for use. The breast should be well rubbed with sweet oil and spirit, mixed in equal parts, as hot as can be borne, and then the plaster should be applied, spread thin upon a linen rag.

[The above was obtained, many years ago, from a physician of high standing, and has been found not less efficacious with the brute than the human family. Young animals frequently suffer very much from hard and inflamed breasts, which, if not relieved, produces very serious consequences both to the mother and the offspring. The above recipe has been always found to afford the most speedy relief. After one trial of its powers, no family will be without a constant supply of the plaster.]

AMERICAN PLOWS ABROAD.

American plows are becoming celebrated abroad, and if the various trials made at home and abroad of the power required to move them may be relied upon, they are superior in ease of draft and perfection of work to any others.—Our plows have found their way to Russia, are creating a new era of agriculture in Turkey, are to be seen at the Agricultural Schools in France, and at the late meeting of the English Royal Agricultural Society, an American plow was exhibited which elicited the greatest admiration; and though not allowed to enter into competition with the English plows, was tried by many distinguished and noble persons, and pronounced a most superior implement.

Alb. Cultivator.

MISCELLANY.

EDUCATION.

How much more powerful is example than precept, and how much the one is sometimes neglected even where the other is most scrupulously enforced.

Parents frequently take the greatest pains to instil into the minds of their children lessons of love, charity, and the christian virtues, yet, inconsiderately exhibit before them the marks of anger violence and unbridled passions. How shocked those very parents would be to know, that they had been sowing in the mind of a beloved child the fruitful seeds of the very vices, which it had been the object of their lives to repress and smother.

Certain it is, that the conduct of a man should no where be so guarded as in the presence of his child. The petty vices of human nature should no where be more carefully repressed, and he

should receive precepts of virtue from one with whom he is accustomed to associate only what is noble and good.

These remarks have been called forth by the following excellent observations on Mrs. Opie's "Illustrations of Lying," in the London Literary Gazette.

"There is one class of lies, which we are a little surprised did not attract a larger share of Mrs. Opie's attention—*Lies told by parents to their children.*

"We believe that the slight regard in which strict truth is held among mankind is principally owing to the lies which are told to children by their parents, during the few first years of their lives. Then is the time that permanent impressions may be as well made as at any later period. It is then probably, that what is called the natural propensity of a child is unfolded. Many persons who have great abhorrence of lying, and whip their children if they detect them in it, yet make no scruple of telling and acting to them the most attrocious falsehoods. There are few parents who do not do this in a greater or less degree, though doubtless without dreaming that they are guilty of criminal deception. With many, the whole business of managing their children is a piece of mere artifice and trick. They are cheated in their amusements, cheated in their food, cheated in their dress. Lies are told them to get them to do any thing that is disagreeble. If a child is to take physic, the mother tells him she has something good for him to drink; if recusant, she will send for the doctor to cut off his ears, or pull his teeth, or that she will go away and leave him, and a thousand things of the same kind, each of which may deceive once and answer the present purpose, but will invariably fail afterwards.

"Parents are too apt to endeavor to pacify their children, by making promises which they never intend to perform. If they wish, for instance, to take away some eatable, which they fear will be injurious, they reconcile them by the promise of a ride, or walk, or something else which will please them, but without any intention of gratifying them. This is lying downright. People think nothing of breaking their promises to children, if the performance be not perfectly convenient. But they are the last persons to whom promises should be broken, because they cannot comprehend the reason, if there be one, why they are not kept. Such promises should be scrupulously redeemed, though at a great inconvenience, and even when inadvertently made. For the child's moral habit is of infinitely more consequence than such an inconvenience can be to a parent.

"We have only noticed a few of the cases of lying to children, but enough to illustrate the frequency of it. And yet, after having pursued a course of deception for two or three of the first years of life, if the parent then finds his child is trying to deceive him, and will tell a downright lie, he wonders how he should have learned to do so, for he always "taught" him to speak the truth; not reflecting that he has been lying to him from his very birth. So he attributes those habits to an innate disposition and tendency to falsehood, which he has himself been fostering and nourishing from the first."

A habit, much too common among our countrymen, and one for which they are most ridiculed by foreigners, obnoxious as it is to every principle of good breeding, is very wittily satirized in the following pun taken from and old paper:

"As several gentlemen of the bar were a few days since in conversation, one of them, under favor of the wind, received a portion of his neighbor's *saliva* upon his summer's coat. "Mr. R——," said the sufferer, "if this is the way you treat other persons' habits, you cannot *expect to rate* as a gentleman."

AUCTIONS.

Strange enough, most of the ordinary usages of life, social, commercial and martial, may be traced up to the remotest antiquity. Who would suppose that a sale by auction, and the red flag, which denotes the locality of him of the hammer, could, by the stretch of fancy, be assimilated with the Roman General, or Imperator, wielding his baton, or truncheon; the symbol, in all ages, of military command? And yet they are the same, as far as their functions with respect to sales are concerned. The system of sale by auction originated with the Romans, who sold their spoils in war under a spear fixed in front of the General's tent. The spear was decorated with, or in the immediate vicinity of the crimson standard, which indicated the tent or residence of the supreme commander, in the centre of the camp.

The celebrated John Stow, in his Survey of London, relates, that there is an old tradition of a flitch of bacon, due, by custom, from the Prior of Dunmore, in Essex, "to him that had lived seven years with his wife, without any disagreement between them; if he should come and demand it, there, at the Priory, on his oath. He never heard of but *three* applications for the flitch; and he has thought it worth while to preserve the names of the applicants. They were Stannel de Ayston, Thomas Leyfuller and Richard Wright. If the custom had only been continued to these improved times of ours, *no doubt* the Prior of Dunmore would find it no sinecure to supply the applications that would be made by the loving lords and dutiful dames of the present day.

To "Arator," who requests us to give a description in our paper of C. T. Botts's straw cutter, of which he speaks in the highest terms, we answer, that uniting in our person the character of editor of the paper, and proprietor of the cutter, delicacy forbids our complying with his request, unless he should make it over his own signature, then our motives could not be misunderstood.

Several subscribers have sent us their names, stating that they will pay for the paper at some future time. It is with regret that we inform such gentlemen, that obvious necessity compels us to adhere to our rule of collecting in advance. The sum we require for subscription is so small that it is clearly not worth opening an account for. The fact of a name being on our subscription list is the only account we keep of the transaction, and that alone entitles the owner to the paper. Of course, those gentlemen to whom we allude, will receive this number containing this notice, and receiving it in the spirit in which it was intended, will, we hope, place their names in our book by remitting us one dollar, either through a Post Master, or if they please, at our expense.

The Editor respectfully offers his services to his friends and subscribers in executing any agricultural commission in this city, or in obtaining for them any information they may desire, which it is in his power to supply. Such communications will always be received and attended to with pleasure.

POSTAGE.

The Planter is published on one sheet, and by the decision of the Post Master General, is subject only to newspaper postage: that is, one cent on each number within the state, or within one hundred miles of the place of publication, out of the state—and one cent and a half to any other part of the United States.

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THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.* | Tillage and Pasturage are the two breasts of the State. *Sully.*

C. T. BOTTS, Editor. **Opposite Merchants' Coffee House, Main Street.**

VOL. I. RICHMOND, APRIL, 1841. No. 3.

TOBACCO.

[In the last American Farmer is published an essay occupying some pages on the cultivation of tobacco. It obtained the second prize offered by the Editor of that paper for the best treatise on the subject. There being no other offered for competition, it was not, it seems, incumbent upon the Editor to have awarded any prize at all, and the one given he states was a voluntary tribute to the excellence of the production. As the directions are clear and simple, and seem to be marked with observation and good sense, we shall extract largely from them, hoping that our tobacco readers will not fail to expose any errors into which the Marylander may have fallen, or to confirm his opinions where they coincide with their own experience. For greater convenience, we shall divide our extracts into four parts, so that the subject will occupy a small portion of this and the three succeeding numbers.]

First, on the PREPARATION OF BEDS, he says,

"I shall begin by giving directions how to choose suitable land and places for beds. The best situation for a plant-bed that will grow plants early, is on a hill side, having a slope towards the south, and if the land suits, the bottom or foot of the hill side is best. This situation fully exposes the bed to the 12 o'clock sun, and keeps off the north-west winds, which are frequent and cold during the spring months. I always select places for beds on the margin of running streams if the land suits. The running water keeps the tobacco flies away on that side, and furnishes water to put on the bed in very dry weather. I have frequently watered tobacco beds with great advantage. The water can be thrown over the beds a considerable distance by means of any thing in the shape of a common scoop with a long handle. All the parts of a bed that can be reached by the water thrown out of the scoop are soon watered. The part that cannot be reached in this manner, can, as the water is convenient, be soon watered by taking the water out of the branch and carrying it and putting it over the bed. Swamp beds may also be watered in dry weather, and the plants made to grow much faster in this manner.

"In choosing land for a tobacco bed, a planter should be careful so as not to take that which is likely to *sponge*—that is, land that dries quick after a rain; for, in this kind of land the tobacco seed will not come up so well, and the ground very frequently dries below the seed after they have sprouted, and consequently kills them. The best kind of land is that which is well covered with vegetable mould.

"Almost any land or situation would answer very well for beds if it was not for the tobacco fly: hence the great importance of choosing places for beds where the flies are not so likely to eat. Flies frequently eat worse in some places than they do in others. I have found them to eat worse in small pieces of woods where beds had been sown in succession a number of years. They are not so apt to eat in places, distant from other places, where beds have been sown or tobacco has been grown. I have always found the first situation that I have mentioned the best, on account of flies; that is, a place not exposed to the north-east or north-west winds. It is a fact that has been long known to tobacco planters, that the flies eat worse during the prevalence of cold north-east winds, than at any other time: hence they do not injure beds in warm so much as they do in cold situations. Another thing is, the plants grow faster in warm places, and are sooner out of their way. As yet, I know of nothing that will prevent flies from eating when once they have gotten in a bed, nor do I know of any thing that will kill them. Many experiments have been tried, but with little or no success. I have known persons to sow sulphur on their beds. Others have sprinkled over them the juice of common elder leaves. Some I have known to sow rye flour on their beds under the impression, that the flour, by forming an incrustation on the plants, prevented the flies from eating. Some suppose that keeping the beds covered with pine brush keeps the flies away. If any covering is of any advantage, it is a covering of well rotted stable manure put on very carefully so as nearly to cover the plants, without covering them entirely up. I have found some advantage from enclosing the beds with a wattling of pine or cedar brush. This kind of fence around beds, whilst it fences them in from the intrusion of stock, prevents in some measure the flies from getting in them from adjacent lands. Some have supposed that a tight plank fence around beds would prevent flies from getting in them, especially if the plank was tarred. As this mode would be attended with

considerable expense as well as labor, it is not likely to be adopted even if found to be a preventive. In very large pieces of woods, the flies are not so likely to injure plants. But at the present day the woods are so cut down that many planters have no such places. After all the experiments that have been tried, with respect to flies destroying tobacco plants, the situation of the bed has been found to be of more consequence than any thing else; that is, places where the flies are not likely to be. I have been rather tedious on choosing suitable places for planting beds; for I consider, that upon these, in a great measure depends the successful growing of a tobacco crop.

"Almost any kind of soil or situation might be made to grow plants, were it not for the flies. These little insects are the greatest obstacle to the culture of tobacco. If it was not for them, the cultivation of tobacco would be as successful as any other culture.

"The best and surest time to sow plant-beds in upland is about the middle of March. Beds sown at this time will produce more plants, and require less picking or weeding to keep the grass and weeds out. There are several objections to the custom of sowing seed in the winter months. One of them is, if there should be a warm spell of weather shortly after the seed are sown, they will come up too soon and are likely to be killed by hard freezing weather. Another objection is, the beds, from having been prepared too early, become so hard before the warm weather commences in earnest, that the plants will not grow kindly. The plants also frequently come up in a sickly state, and very often remain so. Whereas, beds that are sown in March, from having been lately prepared grow the plants off quickly. The seed comes up quickly and in a healthy state, and the plants are not injured by drought, as much as they would be, had the beds been prepared in the winter. The best time to sow lowland beds is about the first of April.

"In preparing plant-beds, it has been the custom from time immemorial to burn them over with brush or wood. This no doubt is the best way where it can be done. It certainly is best to burn a place that has not been used for a plant-bed for several years before. But a bed that has been sowed the preceding year, will grow plants without being burned again. A planter who is scarce of stuff to burn his beds with, may obtain a great deal of briers and brush by clearing up early his land intended for corn and tobacco that year. I have frequently burned beds with briers and leaves. Briers can be put in a cart with a pitchfork and put over the bed with the same. Beds, before the seed are sown, should be well pulverized and cleared of all root or other litter. When sowing the seed it is best to sow one half the seed intended for the bed, and then rake them in the ground. The other half of the seed should then be sown across the way the others were sown, and the bed then *trod* or *patted*. By this mode of sowing the seed the bed is prepared for dry or wet weather; that is, should the weather be dry, the seed raked in will come up; if the weather is wet, both sowings will come. The surest way to have plants is to sow plenty of seed in a bed. It is true, beds will be better with a certain quantity of plants in them; but as plants are liable to be destroyed in so many ways, it is surest to sow *thick*. A great many plants are destroyed by picking the grass out of the beds. Besides, thick sowing is a great security against the flies. Beds that are thinly set with plants are soon cleaned when the flies get in them; whereas, beds thickly set may be considerably eaten by flies, and yet plants enough left: hence the trite saying "sow some for fly and some for I." I have known persons to miss planting their crop of tobacco by not sowing seed enough in their beds; but I never knew to miss by sowing too many. Beds that have too many plants in them can be raked and the plants thinned. This has for a long time been customary. A rake for the purpose is soon made. I have made the teeth with twenty-penny nails.

"Plant-beds, if the land is not rich should be manured. This can be done before the seed are sown or afterwards. If the land is poor it is best to manure the bed before it is sown. Any well rotted manure will answer, but stable manure is best. Ashes answer very well for light soils, and have the advantage of having no grass seed in them. In saving manure for plant-beds, care ought to be taken to prevent grass seed from getting with it; so that stable manure, to be free from grass seed, ought to be saved when the horses are not turned loose out of the stable, and when they are fed on some kind of food that contains no seed. Corn-blades are one of those kinds of food. Hen-houses and the roosts of poultry furnish good manure for tobacco beds. Hog-pens also furnish good manure for plants. When beds are manured after the plants are up, the manure should be put on in a very fine state.

"It is a custom with many planters to cover their beds after they are sowed with pine or cedar brush. This is a very good way to get the plants up, as the brush keeps the land moist. The brush should be taken off the plants soon after they are up, as it makes them tender and what is termed *long-legged*.

"To keep up places for tobacco beds from year to year, as soon as they are done with for that time, they should be hoed or wed up, and then covered with straw or tobacco stalks, three or four inches deep."

AMERICAN MACHINERY.

From the New York Mechanic we make the following extract:

"It is stated that a company in Trieste, Austria, have despatched an agent to buy the entire machinery of a flouring mill, and to take it over to Trieste. Some shipments of wheat having been made to the United States from Austria in 1835, '37, it was ascertained by those that sent it, that when it was ground up in this country, better flour and more in quantity was produced than could be obtained from the same quantity in Austria. The knowledge of this fact caused the mission of the special agent for the purposes above named." A New York paper says:

"The agent on his arrival at New York, contracted with the Lafayette Burr Stone Company at the corner of Robinson and Washington sts. to construct eight run of mill stones, of a sufficient size to turn out three hundred barrels of flour per day. These sixteen stones are now completed, and have been shipped. The running gear and the working gear have all been made in this city, and the whole will cost about fifteen thousand dollars. A miller from Richmond has also been engaged to go out to Austria, to work the mill three years. In short, this country furnishes every thing connected with it except the frame of the mill."

The City of Richmond probably stands without a rival in the art of making flour, which is as much attributable to our climate and the skill of our farmers, as to the perfection of our machinery. The combination secures her forever the supremacy in the flour market.

The miller alluded to in the above extract is Mr. Robt. H. Kuhn, a young gentleman who was brought up under the care of his father, an old miller in the celebrated Gallego establishment; he lived for several years also at the Columbia Mills. He stands high for his integrity, and his skill may be inferred from the opportunities he has enjoyed of learning his business.

We publish the second number of our unknown correspondent, *A Naturalist*, with much pleasure. Without pretending to any originality, he condenses in a clear and simple style the generally received principles of vegetable physiology, which, in their nature, must be introductory to practical deductions. Whilst we eschew every thing like long dissertations upon mere theoretical opinions unsupported by facts, we hail with pleasure any elucidation of scientific principles; for our great object is to open the science of agriculture to the popular view. We only ask that such articles may be, like our correspondent's, as short, clear, and popular as practicable, free, if possible, from technical terms, and adapted to the comprehension of the humblest capacity.

THE INFLUENCE OF CULTIVATION ON VEGETABLES.

The object of cultivation is to place plants under circumstances the most favorable for their growth, and experience has taught us that to do this, we must subject them to the influence of the soil, of moisture, of the atmosphere, of heat, and of light.

Chemical analysis demonstrates to us that vegetables contain a great variety of substances, many of which can only be introduced into them by absorption—this function is performed by the roots of plants, nature having adapted them to the purpose of receiving the water contained in the earth, and of conveying it into the interior of the plant—this water derives from the soil and holds in solution or suspension carbonic acid gas, (the most useful part of manure) carbonate of soda, and of potash, metallic oxydes, silex, and many other materials; so that the first step towards the successful cultivation of plants, consists in placing them in a soil capable of affording these substances.

The effects of moisture are indispensable to plants, (as has been seen above,) since water is the only vehicle by which the materials for their support, and increase in volume, can be conveyed from the soil, to those organs, destined to appropriate foreign substances to the purposes of vegetable life. As the atmosphere is necessary to the respiration of animals, so it is to that of vegetables. The green parts of plants have the power of decomposing the carbonic acid gas contained in the air, (and retaining the carbon for the purposes of the plants, and allowing the oxygen to return to the air,) as well as that absorbed by the roots, and thus enable the plant to add to its volume. The atmosphere is necessary to enable the trunks and roots of plants to execute one of their functions, which is to yield the superabundant portions of carbon, which act requires the presence of the atmosphere; in consequence of which it is hurtful to exclude the air entirely from these parts of plants, skilful cultivation in fact requiring that the earth should be broken up and kept light about the roots, in order to favor this operation.

The effect of heat on vegetables is purely physical, augmenting evaporation and dilating the cells of their tissues, and thus arousing them in early spring from the lethargy of winter, by causing the evolution of their buds, and the ascension of their sap. Various plants support a great degree of heat; the *vitex agnus-castus* grows in a volcanic soil, with a temperature of eighty degrees of the centigrade thermometer, whilst other plants resist cold to the same extent, the *leucoion vernum* flourishes in the snow, and the flowers of the hazel tree have been known to support cold to six degrees below zero, without appearing to be altered, delicate as these flowers are.

Light controls some of the most important phenomena of vegetable life; for it is by the agency of light that the carbonic acid gas of the atmosphere and of the sap is decomposed—light too opens the pores of vegetables to permit

the escape of the superabundant moisture, and to establish a communication from the outside of the plant to the interior; indeed, light is so important to plants that they cannot survive its protracted absence.

Observation has taught us that light colors fruits, and that heat accelerates their maturation, so that the highest colored and earliest fruit, is ripened on a tree trained against a black wall,* where the light and heat of the sun can produce the greatest effect. Skilful cultivators take advantage of the sun's light and heat to give taste to vegetables, or to deprive them of it, by exposing them to, or withdrawing them from its influence; thus we expose melons, peaches, &c. to the sun, whilst we keep lettuce, cabbage, cardoons, &c. in the shade, in order to render them less bitter and more tender.

Thus much of the physiology of vegetables is deemed important, Mr. Editor, to the understanding of the improvement of vegetables by cultivation, which shall be the subject of the next paper from A NATURALIST.

C. T. Botts, Editor of S. Planter.

BERKSHIRES AND DURHAMS.

What bold sceptics those Boston boys are. In days of yore, they dared to raise a doubt as to the *jure divino* of kings, and now they do not hesitate to sneer at the pretensions of Berkshires and Durhams. It seems they hold certain weekly meetings, (*in old Faneuil* probably,) where a Mr. Colman had the temerity to more than insinuate, that Durham cattle, for the pail, were not equal to the native stock; and other free spirits, not having the fear of speculators before their eyes, declared that Berkshires are selling for more than they are worth. These insinuations have not been without their effect upon the excellent Editor of the New England Farmer, who says, that the report is that butchers and meat sellers dislike the pure Berkshires, and he concludes with the following pretty broad hint as to his own opinion: "Those," he says, "who have them already and like them, will of course continue to keep them; those who have fair hogs of a different breed, may do well not to incur much expense to obtain this famous kind, until their relative worth is better understood."

An intelligent farmer, it was stated, in the neighborhood of Boston, who recently slaughtered Berkshires, found his pork so indifferent that he would not eat it, and several concurred in the statement, that, notwithstanding their roundness of appearance, they do not measure so much in the rib as some less valued breeds, thereby verifying the old maxim, that "all is not gold that glitters."

* It has been observed that plants protected from the motions of the wind by walls or espaliers, grow to a larger size than under other circumstances.

It would be strange indeed, if, after all the discussion upon the merits of the true breed, we should discover the tests, at the same moment, that we found that they were not worth talking about. We should be pleased to have some statements of facts from any of our own people, if such there be, who have slaughtered and cured some of the Berkshires. We see no reason why they should not make as good bacon as any other hog, and care should be taken that an unfounded report does not retard the progress of a stock, that, judging by the eye alone, certainly promises a great improvement. We design to give fairly the views of both sides in the contest, which we see is about to arise on this subject, as well as our own conclusions, so soon as we collect facts on which to found an opinion.

To the Editor of the Southern Planter.

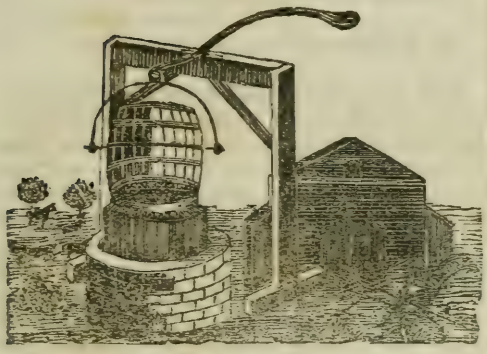
I wish to communicate to the public through the medium of your paper, a simple, but efficacious, if not an infallible remedy, for that vexatious disease in horses called scratches. I have never known this remedy, when properly applied, to fail to effect a cure even in the most aggravated cases. It is, to cleanse the ancles and parts affected with warm soap-suds, then take fresh (warm if you can get it) cow dung, and spread it on a piece of coarse cloth, and apply it to the diseased parts—the cloth should be large enough to completely envelope the leg, and should be securely fastened in front by strings sewed on to it. The dung should be put on sufficiently broad to cover the parts affected, and thick enough to retain moisture for twelve hours, at the end of which time it should be removed, and a second application made, which scarcely ever fails to remove inflammation. It may, however, in some cases, be necessary to make a third application, after which (or when the inflammation is removed) the ancles should be carefully washed, and annointed with mutton tallow moderately warm. My reason for preferring this mode, is, that it will effect a speedy and permanent cure, without subjecting the horse to the slightest pain. I wish also to communicate a remedy for the relief of horses that may chance to be choked, which is as simple, and at the same time as efficacious as the one above. It is simply to bleed the horse in the mouth.

Your readers, Mr. Editor, may feel inclined at the first view to sneer at this remedy, but "a second sober thought" will, unless I am much mistaken, work a wonderful change in its favor. The horse, when bled in the mouth, will lap the blood with his tongue and endeavor to swallow it, and this, coming in contact with the substance by which he is choked, has a tendency to moisten and dissolve it, and also slightly to distend the throat, thus rendering the passage of the substance into the stomach comparatively

easy. Simple as this remedy may seem, Mr. Editor, I assure you I have seen it almost immediately successful in a most aggravated case, and when all other remedies had failed. J. W.

Hanover Co. 10th March, 1841.

Our readers in this neighborhood will easily recognise in J. W. of Hanover, a gentleman well known for his care and success in the treatment of stock. Although there are many efficient remedies for the scratches, the Captain thinks the preceding to be preferred both on account of its certainty, and the speedy cure it effects. Our readers may depend upon it.



Mr. Editor,—Is it not somewhat singular that the poorest farmers, those who most need them, are the very last to avail themselves of labor-saving and economical contrivances? They are indeed in a double sense the *poorest* farmers. One would think that after all that has been said and written on the undisputed and indisputable saving from steaming food, that every man, whose means enabled him to raise only a small crop, would provide himself with so cheap an apparatus as a steaming box, that they might make the little they raise go as far as possible. The large and wealthy farmer may afford the *waste* of feeding raw food, but that certainly is not the case with many who are not provided against it. Why is this? Do they doubt the fact? If they have reason to do so, it is most important they should give their views to the public—if they admit it, why are they without such an apparatus a moment longer? They lack the money to make the purchase—let them sell an acre of land, if necessary; it will save them more food than the acre will make. Nobody seems blind to his own interest but the farmer. In every other branch of business, men watch with the eye of a hawk for every opportunity of reducing labor and cheapening their products, whilst the farmer seems to think either that his present system is perfect, or that it is already so profitable that he need take no pains to make it more so. For the benefit of those who entertain neither of these opinions, but are desirous of availing themselves of any means of reducing labor and adding to their conveniences, I send you the enclosed drawing of an arrangement that I have found a great convenience in handling my cooked food. The drawing represents the usual furnace with a copper boiler, over which sets a cask, with holes in the bottom, suspended in an iron frame, to which is affixed a lever, working on a gallows. With this lever one man raises the cask containing the steamed food, as soon as it is sufficiently cooked, up and off from the boiler. Another, whilst it is in this position, by causing it to revolve in the eyes in which it is swung, empties it into a tub or bin of cold water setting by, when the cask is again returned to its place.

If any of your readers avail themselves of this product of my ingenuity, it is but fair to ask them to give me some information or effort of their brain in return. Otherwise, to make use of it amounts to embezzlement at least, if not downright stealing.

Yours, J. B.

Richmond, March 13, 1841.

C. T. Botts, Esq.

Dear Sir,—Why is it that we see men so eager to embrace new theories on most subjects of doubtful utility, to the entire neglect of those about which there is no possibility of doubt? For instance, let some scheming stranger introduce a subject, which will create the impression that a *speculation* may be made (and thereby entrap the unwary,) and you will see three-fourths of our population eager to have a hand in it, never supposing for an instant that they may be losers thereby, but calculating *how much* they will *realize;* and then propose some plan by which mankind in a moral, intellectual, as well as pecuniary point, may with certainty be improved, and you will perceive those same persons advance with the utmost caution and distrust.

The above reflection was suggested by my attendance, for the first time, at a meeting of the "Henrico Agricultural and Horticultural Society," held this day in Richmond. It is a matter of astonishment to me why there has never been such a Society in this vicinity, ere this; and now that there is one formed, a nucleus around which to cling, that gentlemen of fortune and leisure should not step willingly forward, with their names and money to its assistance, is a still greater cause of wonder. Do they think such a Society is of no use? The continued success attendant on similar societies of other countries, as well as the more northern portions of our own, will be sufficient to give a negative answer to this. Can they suppose for a moment that we have arrived at perfection in the agricultural world? No, they cannot—then

why this apathy on a subject which ought, of all others to be the absorbing topic of talk and action? Can it not be made profitable? The fact that the farmer supports himself and the rest of creation by the sweat of his brow, proves that it is profitable under the worst management. And what will it not be, if we strive to improve our system, by emulating the agricultural portions of other countries? They have found out that the formation of societies have had the most beneficial effect, and our *land-tillers* will come to the same conclusion, after they find that *book-farming* is not so terrible a thing as most of them have taken it to be. Agricultural publications are beginning to be duly appreciated. Intimately connected with the reading of them is the formation of societies. By means of both we may enlarge our views, by an interchange of opinions and ideas. We frequently meet with a hard-fisted *practical* farmer who will readily impart to an inquiring friend any information, verbally, that it may be in his power to give, but who will say that he cannot write for a paper. All we want is for him to give it to the public in the *rough state*, and they will be perfectly willing to make all due allowances for any little imperfections in orthography or diction. To return to our "Society:"—of its officers it is sufficient to state in this place, that they have been selected generally for their practical utility: they are men who may either "hold or drive" as occasion may offer; who, if their own exertions or unflagging zeal in the cause which they have espoused, can do any thing, will reap the reward at no distant period, which the founders and supporters of such institutions invariably attain. Let me urge it as an imperative duty upon all classes to come forward, if not for themselves, for their country and their posterity. The practical farmer needs no stimulus to press on in the good work. He sees in prospective the ultimate, as well as present good to be derived from it. Come then one and all, lose no time in enrolling your names on the list of members, pay up your dollar, and then to finish the business so well begun, call at No. 3, Governor street, and subscribe to the Southern Planter.

I am your well wisher, R. H., Jr.

It is with pleasure that we comply with a request to give insertion to the following minutes:

At a meeting of the Henrico Agricultural and Horticultural Society at the Washington Tavern, 13th March, 1841,

Rev. Jesse H. Turner took the chair, and W. H. Richardson was appointed Secretary *pro tem.*

On recommendation of the Executive Committee, the following gentlemen were elected honorary and corresponding members, viz:

James Barbour, of Orange—Jas. M. Garnett, of Essex—Edmund Ruffin, of Petersburg—Thomas J. Randolph, of Albemarle—Hill Carter, of Charles City—Charles J. Faulkner, of Berkeley—Dr. Carter Braxton, of King William—General John H. Cocke, of Fluvanna—Archibald M. Harrison, of Fluvanna—Richard Sampson, of Goochland—Randolph Harrison, of Goochland—William J. Barksdale, of Amelia county.

Thomas S. Dicken, and Richard G. Haden, were elected Vice Presidents.

The following resolution was passed:

Resolved, That it be recommended to the members of this Society, to procure for their own use the Farmers' Register, and the Southern Planter.

And then the meeting adjourned.

J. H. Turner, *President.*

W. H. Richardson, *Secretary pro tem.*

(We hope that in this Society we have the nucleus of an institution that will do honor to the State of Virginia. It certainly starts with the fairest prospects. Its officers are well selected, being all plain, sensible men, remarkable for their soundness and discretion, and devoted to the cause of agriculture. The President, by his wise and successful operations upon a very unpromising soil, has demonstrated his capability to afford instruction to others, whilst his integrity and suavity eminently qualify him for the station he fills. Our own opinion is that institutions of this character will seldom be successful, except in a large city, and that opinion has been strengthened by observations made in the north, where they most prevail. Want of funds is the general difficulty. The most attractive, interesting, and strengthening feature in such an institution is its exhibitions. For these money is wanting, and to rely upon individual contributions altogether, is extremely precarious. In the northern cities, where they have charged a small fee for entrance to these exhibitions, the attendance has been overflowing, and in this manner a fund has been created which ensured the continuance of the Society. Funds, we repeat, are the very life spring of such an institution, and any facilities by which they can be secured are to be most highly valued. All this Society needs from the farmers of Virginia is a start. Will they withhold it from an institution that may redound so much to their advantage? an arrangement whereby they can have an opportunity to exhibit the effect of their own labors and witness those of others? wherein they will be enabled by an annual meeting, and free interchange of opinions, to add to their own knowledge the experience of farmers from all parts of the Commonwealth? And to effect these mighty ends what is required? That the farmers of the Commonwealth (for to all is the invitation extended) become members

of this Society by remitting their name and one dollar to this office, where the books are deposited, for the present. On this subject we conclude by referring our readers to the able article from R. H., Jr. in another column.)

For the Southern Planter.

Experience derived from the cultivation of a small farm in the neighborhood of Richmond, has impressed the writer with the following views for the promotion of the interest of the owners of the soil, similarly situated.

If the owners and cultivators of the soil in the vicinity of Richmond, will make up their minds to make the exertions, and give the personal attention requisite, I do not doubt, but that it is certainly within their reach in a reasonable time, to make their lands not only fertile but rich, and during the process, derive compensation for the labor, and also a handsome interest on the capital employed. By cultivating such crops as the consumption of the city encourages, it can be afforded to apply fertilizing manures and substances from the city, which can be procured on terms that will justify the expenditure, and in a few years leave the land rich.

An error prevailing with many, is that they endeavor to make too much surface rich in one year. Select as much as can be cultivated well, and manure *generously* in the hill or furrow, immediately where the crop is to grow: and after the deposit of manure is thus made in the hill or furrow, sprinkle it over, and whiten it with lime; and with the hoe, or plough, mix the deposit with the earth, and plant the crop. By planting in the same land several years and changing the hill or furrow, the manuring becomes general, and quite as good a yield is had every year as though the manuring was equal all over the surface. By thus adopting the hill or furrow manuring, the whole of the corn and root, or tobacco crop, can be manured every year.

Crops that will yield the greatest value, on the smallest surface, are best suited to the tedious system of manuring—Irish and sweet potatoes, beets, carrots, turnips, cabbage, peas, tomatoes, corn, and hay—I would also enumerate *tobacco* as liable to but few casualties, not a great exhauster, and as yielding a large value on a small surface. The great variety of fruits suited to our climate, consumed in the city, can be profitably raised in the vicinity—melons and wine no doubt can be profitably made. It is a great desideratum to have as much of your crop as can profitably be, consumed on the plantation. I should consider that butter and cheese would promote that end, and be profitable: that sheep, veal, and hogs for shoats, and early bacon, should be raised. I doubt the propriety of raising cattle at much expense, they being here, very subject to a fatal disease—also I doubt the propriety of raising horses except on roots and hay.

On our lands I believe the ploughing in green crops cannot be relied upon to obtain desirable fertility; it may, however, be indulged in as a valuable *auxiliary*.

If no other motives should induce us to throw in our mite, through your well conceived publication, but to aid in bringing about a prudent and prosperous population to leave our children with, I should regard that of itself sufficient. I am disposed to subscribe to an idea expressed by the Massachusetts Agricultural Society, "that no extensive community or society of people can be happy and prosperous unless their business and amusements are at HOME."

A SUBSCRIBER.

ROTARY KNITTING LOOM.

Messrs. Walker & McIntyre have, for the last two or three days, been exhibiting at our office a knitting machine, that has attracted universal admiration. They demonstrated its capacity to turn off forty pair of stockings a day by the simple revolution of a crank, within the power of a child twelve years of age. The cost of knitting a pair of stockings is estimated at one cent. It is equally applicable to forming a negro sock or a silk shirt. We are not sufficiently acquainted with knitting looms to institute a comparison between this machine and others of the same kind, but, from the representations of those better informed, believe that the advantages are manifold. The quality of the work is certainly very far superior to that from any other machine we ever saw, and in no respect inferior to the product of the most skilful hand. The instrument is extremely simple, and within the management of any person of ordinary ingenuity. We doubt not that this invention is destined to have a wonderful effect upon the price of all kinds of knit goods. We shall watch its progress with great interest.

We find, as we expected, great difficulty in procuring communications from those best able to afford them, the practical farmers of the country; they seem to have an unconquerable aversion to putting pen to paper, and yet, they constantly urge upon us the necessity of furnishing the results of well tried experiments. Whence are we to obtain them? Mr. A. tells us that, although he can do nothing to help us, Mr. B. ought to afford us his assistance, and Mr. B., perhaps in a few hours afterwards, calls to express his astonishment that Mr. A. does not exert himself to impart to the world some of his valuable information. Each is impressed with the obligation that lies upon the other to furnish

his quota to the common stock of knowledge, but neither recognises the rule as applicable to himself.

A very erect, spruce old gentlemen called at our office a few mornings since, as we supposed, for the purpose of subscribing to our paper. Far different, however, was his intent, for walking in a very stately manner, up to our table, and striking his cane upon the floor, he asked, if it was our intention to dwell upon the paved streets of Richmond, and teach the farmers of Virginia how to cultivate the soil. We replied, that we had formed no such presumptuous expectation, but that we had humbly hoped to afford gentlemen, such as he appeared to be, experienced and learned, an opportunity, through our columns, of conveying the results of their experience to their younger and less observant countrymen—he paused a moment, and observed there might be something in that, and finally had his name enrolled amongst our subscribers, giving us reason to believe that the world should no longer want the light of his knowledge.

Now *we* ask our *readers* do you expect us to dwell upon the paved streets in the city of Richmond, and from our own resources afford you a constant supply of the *facts* you so loudly call for? To do so would certainly be a little unreasonable. Lend us then your assistance—stand not back because of a supposed incapability of *writing*; we want no fine words; give us those facts that are worthy of observation, and which must more or less come under the cognizance of every man, who pretends to till the earth—give us the naked fact; from our wardrobe we will contrive to furnish it with a dress. Of those who can, and do not, contribute to agricultural papers, there are several classes. First, there are those who are too inert to do any thing which does not redound to their immediate advantage—there is another, we hope a small class, who are so selfish as to desire to conceal the knowledge they possess; and there is still another, that are willing and able to communicate knowledge, without being aware of it. In the course of time facts have become so familiar to them, that they are supposed to be known to every body else—they forget that a practice universal in one region, may be totally unknown in another. Every man too has some way of doing something, that he thinks better than his neighbor's; let us hear it, and perhaps he will hear of another better than his own.

Every one can afford us some assistance—if he has knowledge he can impart it; if he has none, he can inquire for it, and thereby be the means of extracting it from others.

Upon written communications, however, we have but little reliance—we know the inaptitude of farmers to write, in spite of the most striking appeals to their patriotism. But there is another process, more productive of information. We have, in the back room of our office, a patent knowledge press; in the shape of a point of interrogation, under which we sometimes put a burly farmer, and give him a squeeze. The effect is prodigious; sometimes, at the very first turn of the lever, information flows from him like sugar from the maple tree. Such is the virtue of this machine, that it never fails to elicit something good. The operation is by no means an unpleasant one, and we call it the *squeezing process*—farmers generally are respectfully invited to come and try it—if required, the most confidential secrecy is observed with respect to the name of the individual operated upon.

HEMP.

During the last week, Major Yancey called to see us, and happy were we to find the old gentleman looking as hale and hearty as he did ten years ago. Whatever the Major may be in politics, he is certainly a *wheel horse* in agriculture. We gladly availed ourselves therefore of the opportunity of taking him into our back room, and putting him under the *press*. The consequence was, as might have been expected, that we obtained information of the most important kind to our agricultural friends. The first subject upon which the Major expatiated was hemp. Every farmer should cultivate at least two or three acres of hemp, for his own use—he will find it simple and convenient in the extreme. The crop is a fertilizer, rather than an exhauster. A piece of rich ground should be well prepared and sowed broadcast. The Major has in the last twenty-five years taken twenty-five successive crops from two acres of land, without adding a particle of manure during the time, and he thinks the ground in better condition now than when he began. He only needs a windlass and the common flax break to convert this hemp into leading lines, bed cords, hame strings, and all the other purposes that rope is needed for. The Major declares that there are no two acres on his farm that he esteems more valuable than these two, which are regularly put in hemp.

From this celebrated farmer we also obtained some valuable hints upon other subjects, such as tobacco, wheat, the use of lime, &c., with which we shall furnish our readers from time to time.

Mr. Editor,—All my hopes of a very fine litter of Berkshire pigs have been nipped in the bud in consequence of their being eaten up, hair and hide, tooth and toe-nail, by their unnatural mother; and this too, notwithstanding I have pursued the system of change of food, recommended as a preventive by Dr. Morton.

Can any of your readers account for this perversion of the laws of nature, which is, I believe, peculiar to the hog, and which becomes an important point because of the value the animal is assuming. If we were possessed of more extensive knowledge of the facts connected with the subject, we might be enabled to draw deductions which would lead to means of guarding against a consequence, which in its nature is very provoking, to say the least of it. The only facts that I myself have noticed as connected with the subject are, that of two sows which pigged about the same time and under similar circumstances, the after-birth was carefully removed from the one, whilst no such precaution was taken with respect to the other. The one from which the after-birth was taken eat her pigs, the other did not. I only state the facts, without saying, or even concluding, that there was any other relation than an accidental connexion between them.

Yours, B. S.

BONE DUST.

In a conversation held a few days since with Mr. Richard G. Haden, he informed us, that, during the last summer he procured a quantity of bone dust from the north, which he drilled in with a part of his turnip seed, by way of experiment—the result satisfied him, that he was more than remunerated by the increase of that crop for all the expense of the dust—he has not yet had an opportunity to form any opinion as to its *permanent* effect upon the land. Mr. Haden cannot be particular as to the quantity of bone dust that he used, but thinks that it might have been about a gill to the running foot—he sowed it in a continuous stream in the drill, so that an unbroken line of bone dust could be readily perceived from a considerable distance. Mr. Haden promises to inform us of his observations upon its future effects, but, if he never sees any thing more of the bone dust, he considers himself a gainer by the operation. We asked him to compare the cost of bone dust with that of stable manure—he said it was difficult to do so, because of the variation in the cost of stable manure. When made by the farmer himself it varies with his management and mode of creating it, and when purchased, so much depends upon the distance hauled, that it is impossible to set an average price upon it. He, himself, lives within two miles of the city of Richmond, where he can buy stable manure for a cent a bushel. Under such circumstances, he thinks that the manure that he can either make or purchase for one dollar, is infinitely more efficacious than the bone dust he can get for the same amount; but then he considers that drilling manure, as he always does, for his turnips, mangel wurtzel, and other drilled crops, is a very tedious and lengthy business; he often has not time to effect it; then the bone dust, which is more easily disposed of, enables him very much to extend his drilled crops; and this he esteems a wonderful advantage. From Mr. Haden we have obtained a fund of practical knowledge, which we shall bounteously communicate to our readers. We know of no one gentleman upon whose assistance we place more reliance than upon that of Mr. Haden, and if our readers knew him as well as we do, they would be most happy to know that he is earnest and indefatigable in his desire to impart as well as to obtain information.

AMERICAN FARMER.

[What a wonderful change the last twenty years have wrought in the agriculture of the United States. Barbarous and exhausting systems by which the most fertile plains were reduced to cheerless deserts, have been abandoned—ignorance has been enlightened—science has been brought to the aid of practice, and agriculture has assumed her station amongst the noblest arts. Principally instrumental in effecting this happy change has been the extension of agricultural papers, which are more numerous at this time in America than in the whole world besides. This single fact speaks volumes for the effect of our free institutions, in dispelling the clouds of darkness that rest upon the human mind. The farmers of America, that class which is so numerous in every country, and which is so ignorant elsewhere, pay for and receive more information than the balance of the world. The effect must be, that notwithstanding its immature state, this country will soon rank first in the world for her agricultural knowledge. Whilst our people exult in this proud reflection, they should never forget who was the pioneer in the attempt, which is to result in these happy consequences. Mr. John S. Skinner, inspired certainly more by a patriotism than any pecuniary gain he could hope from the undertaking, established we believe, in the City of Baltimore, the first agricultural paper ever published in America. The old American Farmer is still edited by Mr. Skinner with unflagging ability. The agricultural community owe him a debt of gratitude they never can repay, and from the fraternity he is entitled to to the greatest respect, not only on account of his seniority, but for his uniform courtesy and politeness.

To the people of the south, particularly, the Farmer is recommended, as well by its locality, as its devotion to their peculiar interests.

As a small recompense for the pleasure and information we have derived in by-gone days, when we were one of the farming community, from the early numbers of the American Farmer, we lend our assistance to give circulation

to Mr. Skinner's liberal proposal. With great pleasure will we receive subscriptions for the paper at our office.]

A PROPOSITION.

The publisher of the AMERICAN FARMER proposes that

Any one obtaining 20 subscribers for the American Farmer, and remitting the money therefor, ($50,) for one year, (or become responsible for the same,) shall receive for his trouble a handsome full-bred Berkshire, 8 to 10 weeks old, or a pair of Tuscaroras, (a cross of the Berkshire on the China,) caged and furnished with food, if necessary, to any part of the United States.

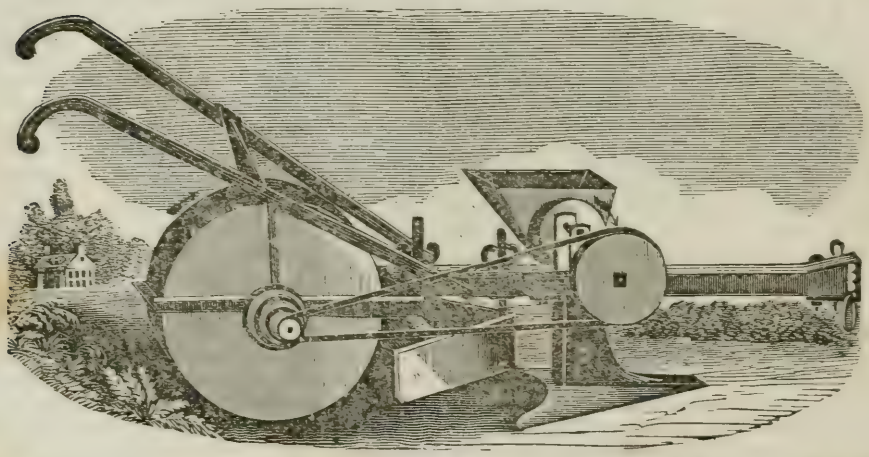
Or, for the same number, and on the same terms, shall receive any agricultural implement, fruit or ornamental trees, shrubs, seeds, or books, to be found in catalogues which will be forwarded to subscribers at a distance in a few days, to the value of $12 50.

Also, any one obtaining 5 subscribers, and remitting $10 therefor, shall receive volume 1 or 2 of the new series of the "American Farmer," neatly bound in boards if required, or forwarded in sheets to any part of the United States.

For 10 subscribers and $20, vols. 1 and 2 do. do.

For 20 do. and $40, vols. 1 and 2 American Farmer, and 3, 4 and 5 Farmer and Gardener, all bound, if desired.

BACHELDER'S PATENT CORN PLANTER.



BACHELDER'S PATENT CORN PLANTER.

This implement has given great satisfaction to the members of the Legislature, and others to whom it has been exhibited in our city during the last week. We have not had an opportunity of seeing it in operation, but its construction is so simple that its efficiency cannot be doubted. Our exchange papers from the south, the east and the west, speak of it in the highest terms. The editor of the Farmer's Monthly Visiter, a paper of very high repute, published in N. Hampshire, declares it to be far the best implement of the kind he has ever seen. It is intended for the sowing or planting of any kind of seeds, but is peculiarly adapted to planting corn. The intervals can be increased or lessened at pleasure, and with a little attention the operation is made certain. The peculiarities of this machine are that it does not open a furrow, consequently does not need coverers, which increase the expense and complication of other machines. It also has an excellent apparatus for guaging the depth of the planting. We are clearly of opinion, to say nothing of increased expedition and saving of labor, that a farmer with a large corn crop to plant, would save more than the price of this machine in one year, from the advantage to be derived from the uniformity both of depth and distance, which the most particular hand cannot equal. Not the least of its recommendations is, that the implement is remarkably well and substantially made. We have ordered a half dozen, several of which are already bespoken. Price $25.

BOARD OF AGRICULTURE.

[Of all the classes in our community the first in numbers and importance is undoubtedly the AGRICULTURAL; and yet, we are about to record the first Legislative enactment in Virginia intended for their peculiar benefit. We are no

great admirers of Legislative interference generally in any branch of business, and think that, most frequently the favors of the Legislative body are as ill timed and injurious as the caresses of the ass in the fable, dissatisfying and destroying where they are intended to please and preserve. But with the following we have no fault to find—it proves at least that Virginia is aroused to the importance of her agricultural interest. Indeed, if the selections are well made, and gentlemen can be found, (which we doubt not,) who will discharge a laborious duty faithfully for the honor alone which it will bring to them, and the benefit it will bestow upon their country, then, inestimable are the advantages to be derived from the following:]

BILL TO ESTABLISH A BOARD OF AGRICULTURE.

Whereas, it is represented to the General Assembly of Virginia, that the agricultural community have various interests, requiring the fostering care of the State, which should be extended to them according to some system approved by observation and regulated by experience. And whereas it appears to the General Assembly that these ends would be promoted by the establishment of a Board whose duty it should be to present to the Legislature from time to time a general view of the agricultural statistics of the commonwealth—to inform the public of the progress of improvement—to communicate such facts, as when collected and digested, may promote the agricultural interests of the State: and to suggest such measures for the adoption of the General Assembly, as the aforesaid Board may deem proper for the development of the resources, and the protection and advancement of that important branch of industry in the commonwealth;

Be it therefore enacted, That a Board, to be called a "Board of Agriculture," shall hereafter be constituted, to consist of eight members, to be appointed triennially by the Executive of this commonwealth; of whom two shall be selected from each of the four divisions of the State, as specified in the second section of the third article of the Constitution, for the apportionment of representation in the House of Delegates; any three of whom may constitute a quorum for the transaction of business.

Be it further enacted, That it shall be the duty of said Board to present annually to the Legislature a general view of the condition of agriculture in the State:—to report the nature and quantity of the agricultural staples, so far as they may be able to ascertain the same: to collect and digest such facts in relation to the improvement and cultivation of the soil, and the best modes of preparing its various products for their appropriate uses, as they may think would afford useful information to the agricultural community—to report, so far as they may ascertain the same, the relative degrees of encouragement afforded by the State of foreign and domestic markets to the various agricultural productions of this commonwealth, and to suggest to the Legislature such measures as they may deem desirable for the development of the resources, and the promotion of the general interests of agriculture in this commonwealth.

And be it further enacted, That it shall be the duty of said Board to hold one session in each year, at such time and place as may be fixed upon by the Board, with the consent of the Executive.

This act shall be in force from the passage thereof.

Let it not be forgotten, that this bill, passed on the 20th March, 1841, is the result of persevering action on the part of the HENRICO AGRICULTURAL SOCIETY.

KICKING COWS.

From the Cultivator we learn that a Mr. Kidder has communicated to the Hancock Agricultural Society a mode which he pronounces an effectual cure for the bad habit which cows sometimes acquire of kicking under the operation of milking. This is neither more nor less than to tie their heads up a few times, until they become perfectly quiet. We can see that this would effectually prevent a cow from kicking up, that is, from raising both her hind legs off the ground at the same time, because, for this action the head must be thrown down, but we do not exactly see how it would prevent the cow from kicking out with one leg, which we believe is the most common practice. But Mr. Kidder speaks with great confidence of the success of his remedy in every case, and its simplicity certainly entitles it to a trial.

CLOVER IN CORN.

We notice a piece in the agricultural papers, stating that a Pennsylvania Senator near Philadelphia, who is a good farmer, is in the habit of sowing a full crop of red clover the last time he works his corn. His success is reported universally good, and if this system were successful in the southwest, we believe it would contribute much to our husbandry. It is said the corn shades and protects the young clover, so that it gets a firm set, and gives a good crop the spring after sowing. Has any one in the west tried it?—*Agriculturist.*

LARGE GARDENS ON SMALL FARMS.

[The most profitable acre on every farm is a well cultivated garden. Not only is the product more abundant, but the nett profit is infinitely greater. Why is this? Because of its superior cultivation; because of the concentration of labor, whereby a small surface is made to yield a product as great as a larger one, and the con-

sequent saving of the labor, which is lost in the frequent traversing the greater space. The cost of production consists in the expense of manuring, working, reaping, and sowing. Now, suppose a man has 30 acres of land, and a given amount of manure and labor, if you can shew him that the manure applied to one acre will yield as much as if scattered over the 30, will he not save himself the labor of spreading it over the other twenty-nine? It is true that the one acre, to produce the same yield as the 30, will require a much more minute and tedious cultivation than any *one* acre of the thirty, but certain it is, that the same amount of yield can be obtained with less labor than will be required to cultivate the *whole* thirty, and that, for the reason we have before mentioned, viz: the saving caused by the smaller space to be travelled over in the frequent operations of ploughing and hoeing, reaping and sowing. The man who, under such circumstances, does not concentrate all his force and means upon the single acre may be likened to a miner, who would leave a solid seam of gold to hunt over a tract of land for surface ore.

There is undoubtedly a limit to this mode of cultivation; there is certainly an extent of labor and of manure to be applied to an acre, beyond which it is not profitable to go, but that point we are afraid is and will be for a long time beyond the common standard of our country. Until an acre of ground however is brought to that point, it is the height of folly in any cultivator of the soil to cultivate more than a *single* acre. What is that point it will be asked, to which we now allude, and of which we have spoken before? The answer will depend upon the crop that circumstances will render profitable. For some crops the point is much higher than for others; as for roots and vegetables it is much greater than would be necessary for wheat and rye. The question then occurs, to what extent can you use root and vegetable crop? The difficulty of keeping the most of them limits the market for them as well as the home consumption, and it unfortunately happens, that those crops, which are not so profitable, because so much of them cannot be raised on the same surface, keep best, and must continue to be the great agricultural staples, until this difficulty is removed from roots and vegetables. But the great error is, that here, to the south, we do not cultivate these profitable crops, so much of which may be raised upon a small surface, even to the extent for which there is a demand for them. If we are right in our supposed value of them, the farmer should first secure these crops to the extent to which he can use them, before he turns his attention to another more unprofitable acre. If any is to be neglected, it should surely be the poorest and least profitable. The various uses to which these root crops may be applied is not properly understood among us; if they were, the farmer who now has only a single acre in this kind of cultivation, which he denominates his *garden*, would extend it to several acres, and attach more importance probably to his *garden* than any other portion of his ground ten times as great in surface.

We have been led into this article by the following excellent extract from the Farmer's Cabinet.]

"And now let me say a word in favor of a large garden, even upon a small farm: if the experiment were to be made, it would surprise any one to see how much the consumption o meat in a family could be reduced, to the manifest advantage and comfort of all, by the substitution of large quantities of vegetables of different varieties; and I would recommend, that at all times a greater quantity of these should be cooked than are expected to be eaten by the family; this, and a great variety, would be an inducement to their expenditure, if they were well prepared; and every fragment that remains should be gathered up, and fed to the poultry, with the water also in which they have been boiled with the meat; all this, if well mashed up and mixed with meal, will afford excellent food for poultry of all kinds, and is by far the best means of affording plenty of eggs the year through, after all that has been said and done upon that subject.

"A calendar of work to be performed every month in the year in such a garden, would take but little space in the pages of the Cabinet; and if a few remarks at the commencement were to be added, pointing out the benefits and advantages to be derived from a more plentiful use of vegetables, and a less consumption of salted meats in this hot and dry climate, the result would, no doubt, be happy, and very much tend to the preservation of the health of the agricultural community in general. K.

"N. B. It would be an excellent plan for the farmer to devote an hour or so to the garden before breakfast in the morning; then, if all hands turn to heartily, much labor could be performed in a very short time."

FOOD FOR HORSES.

Can the editor of the Jeffersonian Republican give us any information as to the practical character of his correspondent "A Mountain Farmer," who recommends the use of *dry* chop feed. It is contrary to the universal custom, is certainly objectionable in some respects, yet comes from him who "speaks as one having authority."

SHEEP.

We have long thought that this animal was too much neglected in Virginia and the southern country gene-

rally. We know a very practical farmer, who thinks the sheep, beyond question, the most profitable animal that has yet been domesticated. In pursuance of these views, and to bring attention to the subject, we copy the following from the Farmer's Cabinet:

STALL-FED SHEEP.

Mr. Editor,—I find in the Quarterly Journal of Agriculture, a very interesting account of two experiments on stall-feeding sheep. One is at a loss to comprehend why this is not oftener practised in this country than it is, for the advantages would be great, not only in the supply of the market with a superior quality of meat, but to the feeder, who would find a ready sale for his sheep, at a considerable advance in price: while the convenience of stall-feeding sheep—their quiet, cleanly habits rendering them a peculiarly pleasant *household family*—must be apparent to every practical man. After this, comes the advantage in point of quality and quantity of wool, the first of which ought to weigh with the wool-buyer in this country, as it does in every other where this system is pursued. The greater variety of articles as food for fatting sheep, which might be grown here, would be of very considerable moment, for to no other stock is a change of diet of so much importance, as is well known to all who have practised the system of stall-feeding, whether for making fat mutton or house lamb.

The first experiment was conducted by Mr. Wilkin, with sheep, a cross between the Cheviot and Leicester or Dishley, of the age of over one year, denominated technically, *Hoggs*. The best sheep in the lot weighed 157 pounds alive, indicating about twenty pounds per quarter, dead weight; they had been kept in a shed and open court since the 25th of November—the time of slaughtering being the 16th of April—and the average increase of live weight during that time on each sheep was forty-eight pounds and a half. The daily weight of turnip for each sheep was 17 pounds, and the cost of grain and oil-cake for each was seven shillings and sixpence. The increase of value was from 22*s.* to 25*s.*, and afforded a considerable profit on stall or house-feeding.

The second experiment was made by Mr. McBryde. During the month of December, 1838, he tied up a number of the pure Leicester breed in stalls, and fed them on turnips, rice, sago, sugar, and linseed oil; and in December, 1839, he tried the same experiment on a lot of common-bred wethers; he gave them daily a quantity of linseed, and as many turnips as they would eat, and the experiment far exceeded his expectations. The quality of the mutton was of the finest description, and the wool, by being sheltered, one day from the cold and drenching rains, and the sun and drying winds the next, was soft and fleecy, far superior to that on the same kind of sheep which had been fed abroad; and another great advantage which the stall possesses over the field-feeding is, preservation from the diseases which the damps and vicissitudes of the weather often engender. The whole lot was sold to Mr. Boyle for slaughter, and so high was his opinion of their excellence, that he paid seven shillings per head more for them than for others of the same lot that had been field-fed.

Mr. McBryde remarks, "although the last lot has proved exceedingly prosperous, yet the pure-bred Leicesters were more so; and although at first confinement to the stall they consumed a greater quantity of turnips, yet in the end there was a great saving, as they did not require near so much as they would have done in the fields. The nutritious quality of the linseed made the mutton of the very richest flavor, peculiarly firm and juicy." He expresses his opinion that many farmers will try the experiment, for during both seasons those tied up in the stalls were exceedingly healthy—far more so than the lot from whence they were taken at random, and required but little attendance. The first which was killed weighed 82 lbs. of mutton, having 18 lbs. of fat. JOSHUA STILES.

Berks County.

As there are many persons that, even in summer, cannot obtain green meat for cows, we copy the following from the Western Farmer, notwithstanding the season, for which it was intended, has passed.

WINTER FOOD FOR COWS.

Mr. Charbert, the director of the veterinary school of Africa, had a number of cows which yielded twelve gallons of milk every day. In his publications on the subject, he observes that cows fed in the winter upon dry substances give less milk than those which are kept upon a green diet, and also that their milk loses much of its quality. He published the following receipt, by the use of which his cows afforded him an equal quantity and quality of milk during the winter as during the summer:—

"Take a bushel of potatoes, break them whilst raw, place them in a barrel standing up, putting in successively a layer of potatoes and a layer of bran, and a small quantity of yeast in the middle of the mass, which is to be left thus to ferment during a whole week, and when the vinous taste has pervaded the whole mixture, it is then given to the cows, who eat it readily."

The Sugar-beet answers the same purpose well.

MEASURING CORN.

The following rule for ascertaining the quantity of shelled corn in a house of any dimensions, is by Wm. Murray, Esq. of South Carolina, and was read before the St. John's Collec-

tion Agricultural Society, and communicated by them for publication in the Southern Agriculturist.

Rule.—Having previously levelled the corn in the house, so that it will be of equal depth throughout, ascertaining the length, and breadth, and depth of the bulk; multiply these dimensions together, and their products by four, then cut off one figure from the right of this last product. This will give so many bushels and a decimal of a bushel of shelled corn. If it be required to find the quantity of eared corn, substitute eight for four, and cut off one figure as before.

Example.—In a bulk of corn in the ear, measuring 12 feet long, 11 feet broad, and 6 feet deep, there will be 316 bushels and eight-tenths of a bushel of shelled corn, or 633 bushels and six-tenths of ear corn, as:

12	12
11	11
132	132
6	6
792	792
4	8
316,8	633,6

The decimal 4 is used when the object is to find the quantity in shelled corn, because that decimal is half of the decimal 8, and it requires two bushels of ear corn to make one of shelled corn. In using these rules a half a bushel may be added for every hundred, that amount of ears results from the substitution of the decimals.

From the Western Farmer.

HINTS FOR MAKING MANURE.

As it is not in the power of small farmers and gardeners to keep a sufficient number of animals to make a large quantity of manure, (usually prepared in the farm yard,) to form a source of wealth so much neglected in situations really requiring these means, and difficult to obtain them, we will now give some directions for the best substitute for this purpose. First, then, dig a pit in a convenient part of the farm or garden premises down to the clay, if there be any, or a kind of tank or cistern near the house would be still better, and put a layer of finely broken earth on the bottom, on which throw for some little time, say a week, all the suds, dirty water, and *all* other liquids from the house and farm that can be collected,—the whole to be properly mixed together with a shovel, the operator standing on the brink of the pit or tank; and afterwards a thin layer of earth, road scrapings or sods to prevent evaporation. In another week, or as often as possible, add another layer of finely broken earth, and other liquids from *all quarters*, till your pit or cistern is full, and ready to be cleansed out, to give room for another "making." When the material is thrown out of the pit, it will be always necessary and proper to cover it over entirely with weeds or some kind of refuse, as straw, &c., but the more vegetable matter the better. It will be found, if this process be earnestly persevered in, that a greater quantity of this kind of manure to produce fine crops, than is usually made from the farm yard, will not be necessary, and the good effects will remain in the soil, and appear on the future crops. Buts should be made in different parts of the surface of the heap, the liquid being alway immediately covered over. Lime in successive layers would greatly add to the richness and value of the above compost, and leaves from the woods might be added to it occasionally with great advantage. Now, learned essayists, classical theorists, and scientific exposers of modern terms may laugh at this simple plan of agricultural enrichment, but here is a matter on which we may exercise nearly all our senses—we can see it, touch it, most certainly smell it, and at any stage of the process we can readily hear it. But before concluding, we must observe, that different manures are adapted to different soils and different plants, and a long continuance of the same manure to the same soil is often injurious. We must here also remark, that we have known many farmers to draw manure, at a dear rate, from towns, who were allowing much liquid manure, for want of a trifling arrangement in the stables, viz: wooden gutters, to "waste its sweetness in the desert air."

E. J. H.

LUCERNE.

[It is now time that farmers and gardeners were sowing this valuable grass: some diversity of opinion exists as to the question of drilling or sowing broadcast; in either case, the ground should be nicely prepared and made very rich. It forms an excellent edging for squares in gardens, where it answers the double purpose of ornament and profit by its most productive yield. Its value is beginning to be understood, and its cultivation is too general to make any particular directions necessary. It has been considered very valuable because of its early maturity, and the fact of its affording green food at a time when none other can be had. Against this use of it, however, we are cautioned in the following extract (taken from the Western Farmer,) from a little work published by order of the French government, to be distributed amongst the dairy keepers of Paris and its vicinity.]

"Lucerne given green, alone, without discretion, before the flowers open, covered with dew, or wet with rain, and not yet withered a little by

the sun, is apt to give cows the gripes, and blast or blow them, a disorder which sometimes ends fatally. This plant, so far from being cooling, as some have imagined, is really very heating. It not only makes the milk of middling quality, but it is even certain, and farmers who are candid acknowledge it, that this milk taken alone, is of a heating quality. It has also been observed by farmers, that when pressed by a deficiency of other nutriment, or from economy, they are induced to keep their cows on green lucerne, and especially the second crop, and on no other food, they are subject to eruption, and an oozing of a yellowish or reddish fluid, which generally first appears on the pasterns of the hind legs, and spreads successively to the hocks, the thighs, the udder, and the belly. It does not often attack the fore legs. The skin chops, or is drawn up into folds, and exudes a sharp humor, which gradually dries, and forms yellowish crusts or scabs, which gradually fall off with the hair, and leave the skin naked. The thighs are so inflamed that the animal feels great difficulty in lying down.

"This eruption causes so much weakness sometimes, that the cows cut the inside of the leg with the opposite foot, and make themselves bleed; the appetite and milk diminish, but at the same time they ruminate, and do not appear in other respects ill: it is observed that they always drink more than other cows. It continues about fifteen days, and terminates more quickly when the farmer does not apply butter, fat from the frying-pan, or other greasy matter to it, which is a common practice with them. The using these greasy and rancid applications leaves swellings in the legs which are a considerable time in going off. The sooner the cause of eruption, lucerne, is taken away from the cow, the more quickly does the disease cease; but the farmer has not always a sufficient quantity of other food to give them: he must then mix with the lucerne as much as he can of that fodder, whether green or dry, which he can procure; which should not be given till the day after it has been cut; during this time it should be spread out, and exposed to the sun It will be useful also to sprinkle it with water in which some salt has been dissolved, immediately before it is given, and it should be given in smaller quantity than usual. In addition to these measures, they should be allowed white water to drink; that is, water with a little flour mixed up in it; the eruptions should be kept clean with warm water, or with an infusion of elder flowers: this, with walking exercise, pure air, good litter, and a strict attention to cleanliness, will soon subdue the disorder, which, though not of a very dangerous nature, is extremely disgusting, and cannot fail of giving those who see it a distaste for milk."

[We are generally a little shy in repeating floating rumors of wonderful improvements, which frequently turn out to be wonderful humbugs; but the following is so important in its nature, and comes in such an unquestionable shape, that we are induced to copy it from the Boston Cultivator, a paper of the highest respectability:]

A NEW MODE OF MAKING CLOTH.

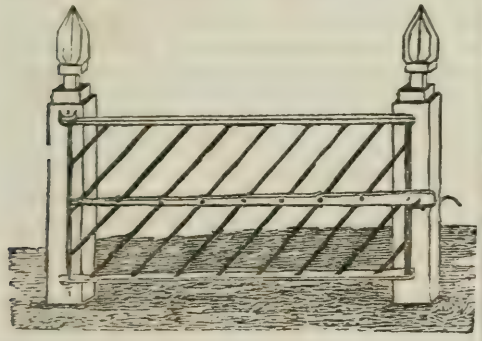
A correspondent of the Post writes from London that an American by the name of Wells has invented a new mode of manufacturing woollen cloth which will reduce the expense not less than three-fourths. It is made without spindle and without loom and is fully equal to any spun or woven broadcloth. Our readers well know that hats have long been made of wool without a single thread, and that the body of the manufactured article is more firm and durable than any woven cloth.

If it be a fact that three-fourths of the labor may be saved by *compressing* the wool instead of spinning and weaving it, the advantage to this country will be greater than to any other in proportion as labor is higher here than elsewhere. The writer of the letter says:—

About six months ago, I was introduced to an American who visited this country for the purpose of securing a valuable patent for a new method of manufacturing woollen cloth. I examined numerous specimens of the cloth, all of which appears very well, and possessed important improvements over the English broadcloth, and cassimere; but as I know little about the article, I did not make any mention of it at that time, for however sanguine an inventor of any new instrument may be, or however strongly convinced the discoverer of any new theory or system may be, that it is superior to all others, the public do not always find it to prove such. As this woollen cloth is now offered for sale, and as several of the large London houses have purchased hundreds of pieces for the purpose of introducing it, I am justified in calling attention to it.—The *Colonial Gazette* thus noticed the patent several months since. "Mr. Wells has invented a machine, and has discovered a process by which woollen cloth of every sort is produced at less than a fourth of the cost hitherto usual. The material is not *woven* but *compressed.* Two urchins, with the machine, can turn out one hundred yards of the broadcloth in twelve hours; and where twenty-four shillings were demanded per yard, six shillings afford the new manufacturers abundant remuneration. We have inspected and handled, as roughly as we liked, specimens of every variety, from the finest scarlet cloth for officers' uniforms, down to blankets and carpets, and we certainly could not, either by sight or touch, distinguish them from corresponding pieces made in the old fashion."

The new cloth is likely to create a great revolution among the manufacturers, for already

they discover that it is something more than a mere bubble of an hour. The Austrian government has purchased the right to manufacture in Austria, and several other rights to manufacture it in England and France have also been purchased. There are four or five large mills now in constant operation in this country, which turn out daily several hundred pieces of the cloth of various qualities. Soon the markets here will be filled with it, and no doubt a large quantity will be sold in the United States, as Mr. Wells, who is a New Yorker, informed me that so soon as he had completed all his arrangements for supplying the European markets, he should establish several large factories in America. Mr. Wells has worn a frock coat made of his new cloth, almost every day during the last six months, and it is an elegant garment even now; the material being *compressed*, there is no thread in it, and the *nap* has the same smooth, glossy appearance as when I first looked at it. The cheapness, durability, and beautiful appearance of this cloth must give it a decided advantage over all other kinds. So far it has met with great favor from the most extensive dealers in cloths in London.



Mr. C. T. Botts,

Sir: I liked the "Hanover gate of your correspondent in some respects very much; but, whilst he writes very sensibly on the subject, there is a very important part of every gate that he has entirely omitted, both in his cut and description—I mean the *brace*.—I herewith send you a drawing of a gate that I have been long using, to my entire satisfaction, made also all of cedar, "gotten out with the grain," that I think is superior for common purposes to any other I have ever seen. The frame is made by tenoning 4 pieces of hewed cedar, if you please, together, and then running cedar poles through them in the manner indicated in the drawing—each slat here serves as a brace, and the whole makes a remarkably strong, neat and *light* gate. A light narrow slat may run across the gate, and serves as a latch. The hinges described by your correspondent I know to be not only the cheapest, but the best in use; although, I always prefer hanging my gate to the outside, rather than the inside of the post; by this means, the post protects the gate from the consequences of careless driving.

I am much pleased with the practical character of your paper, and hope it will find its way into the hands of every farmer in Virginia.

Yours, P. H.

SAW DUST.

The "Cultivator" says, that where abundance of straw cannot be obtained, saw dust may be used to advantage as a litter for stables, piggeries, &c. where, by absorbing the liquids of such places, it will make a valuable addition to the dung heap. It is used in this way by the Shakers at Canterbury, N. H., who think it preferable to straw as a little for stables.

ROHAN POTATOES.

In the last Cultivator there are several attestations as to the value of Rohan potatoes, and Mr. J. A. Thompson the gentleman who first introduced them, expresses the opinion that much of the prejudice that exists against them has arisen from the use of a spurious article, which he avers has been extensively sold and cultivated in some parts of the country, and also from the use of the genuine potato before it was well ripened.

At a meeting of the Executive Committee of the Henrico Agricultural and Horticultural Society, on the 27th day of March, 1841, the following were determined upon as the subjects for and amounts of the Premiums to be awarded at the first exhibition of the Society, which will be held on Wednesday, the 26th day of May next, instead of the time heretofore reported, viz:

1st.	For the best Horse or Colt, calculated to produce the best stock for the draught or saddle	$15
2.	For the best Brood Mare do.	10
3.	For the best Jack	15
4.	For the best Bull for domestic purposes	10
5.	For the best Milch Cow	10
6.	For the best yoke of Oxen	10
7.	For the best Boar of improved breed	15
8.	For the best brood Sow, to be exhibited if practicable with her litter of pigs	10
9.	For the best specimen of Fruits, the production of the exhibitor—a fruit basket of the value of	10
10.	For the best specimen of rare and beautiful plants or flowers—a silver bouquet holder of the value of	10
11.	For the best specimen of Vegetables	15
12.	For the best cultivated Market Garden, not less than one acre—a set of garden tools of the value of	15

13. For the best specimen of domestic Wine, the production of the exhibitor $10
14. For the best specimen of domestic Silk, not less than one pound, the production of the exhibitor - - - 10
15. For the best specimen of Butter, not less than 5 pounds—a silver cream pot of the value of - - 10
16. For the best suit of Clothes of Virginia manufacture, the premium to be given to the producer of the material of which the clothes are made 15
17. For the best specimen of Agricultural Implements, including cutting machines, corn-shellers, &c. - - - 15

The Committee have not felt themselves warranted in offering higher premiums at this time, but will increase and enlarge the subjects as the funds of the Society may enable them to do.

They deem it proper to give notice, that at the Fall Exhibition the following additional premiums will be given, and that they will be as large as shall be practicable, to wit:

For the best Cultivated Farm.

For the best Field of Corn, not less than five acres.

For the best Crop of Turnips, Beets, Carrots, Parsnips, Sweet or Irish Potatoes, not less than half an acre of each.

For the best Piece of Domestic Carpeting, not less than twenty yards.

For the best Hearth Rug.

For the best Table Cloth.

For the best Counterpane, Bed-quilt or Comfort.

And for other articles of household industry.

The members who have not subscribed to the Constitution, and the citizens generally, will be called upon by some member of the Society to enable them to become members.

JESSE H. TURNER,
THOMAS S. DICKEN,
RICHARD G. HADEN,
WILLIAM H. RICHARDSON,
JOSEPH RENNIE,
WILLIAM D. WREN,
Executive Committee.

The Executive Committee desires us to state, that it is expected a Fair will be holden during the exhibition, for the sale of such articles and animals exhibited as the owners may choose to dispose of. Here a fine opportunity will be afforded those desirous of seeing and supplying themselves with the best stock the country will afford.

It is desirable that those persons intending to compete for premiums, should enter their names as soon as possible, which may be done by application to any member of the Committee, or to the Editor of this paper.

Individuals to whom premiums may be awarded, can receive the same either in money or in the shape of plate as they may prefer.

SWEET POTATOES.

Mr. Dicken, (Vice-President of the Henrico Agricultural Society) called at our office to state his entire approval of Mr. Bernard's mode of cultivating sweet potatoes, (see page 18,) with one exception. He prefers cutting off the first fibres that are put forth by running a plough or cultivator close to the hill, instead of throwing the earth to them, which he does at the *second* working rather than the *first*. By this means he lessens the number of fibres, and prevents the accumulation of small potatoes, or *strings*, as they are technically termed.

Mr. Dicken says he was inclined to think his neighbor, Mr. Bernard, was *riding a hobby*, in his estimation of the value of sweet potatoes, until he gave them a fair trial; he is now satisfied that, as food for stock, they are invaluable.

GARDENS.

From Cobbett, whose excellent little work on the subject ought to be in the hands of every gardener, we condense the following directions for *locating* and preparing a garden. The importance of the subject, and the excellence of the matter must form our apology for the length of the article. We have been at some pains to collect and condense his views upon the subject. These directions are intended chiefly for those who have their gardens yet to make, but may be valuable to all:

"The ground should be as nearly on a *level* as possible; because, if the slope be considerable, the heavy rains do great injury, by washing away the soil. However, it is not always in our power to choose a level spot; but, if there be a slope in the ground, it ought, if possible, to be towards the *south*. For, though such a direction adds to the heat in summer, this is more than counterbalanced by the *earliness* which it causes in the spring. By all means avoid an inclination towards the north, or west, and towards any of the points between north and west.

"The garden should be an oblong square with the length from east to west twice as great as the breadth from north to south. By this form three important advantages are gained. First, we get a *long* and *warm* border under the *north fence* for the rearing of things early in the spring. Second, we get a *long* and *cool* border under the *south* fence for *shading*, during the great heats, things, to which a burning sun is injurious. Third, by this shape of the area of the garden a larger portion of the whole is sheltered, during winter and spring, from the bleak winds.

From a kitchen-garden all *large trees* ought to be kept at a distance of thirty or forty yards; for the *shade* of them is injurious, and their

roots a great deal more injurious, to every plant growing within the influence of those roots.

"Grass, which matts the ground all over with its roots, and does not demand much food from any depth, does not suffer much from the roots of trees; but, every other plant does. A kitchen garden should, therefore, have no large trees near it. In the spring and fall tall trees do great harm even by their *shade*, which robs the garden of the early and the parting rays of the sun. It is, therefore, on all accounts, desirable to keep all such trees at a distance.

If it be practicable, without sacrificing too much in other respects, to make a garden near to running water, and especially to water that may be turned into the garden, the advantage ought to be profited of; but as to *watering* with a *watering pot*, it is seldom of much use, and it cannot be practised upon a large scale. It is better to trust to judicious tillage and to the dews and rains. The moisture which these do not supply cannot be furnished, to any extent, by the watering pot. A man will *raise* more moisture, with a hoe or a spade, in a day, than he can pour on the earth out of a watering pot in a month.

The plants, which grow in a garden, prefer, like most other plants, the best soil that is to be found. The best is, loam of several feet deep with a bed of lime-stone, sand-stone, or sand, below.

We ought to reject *clay* and *gravel*, not only as a top soil, but as a bottom soil, however great their distance from the surface.

Oak trees love clay, and the finest and heaviest wheat grows in land with a bottom of clay; but if there be clay within even six feet of the surface, there will be a *coldness* in the land, which will, in spite of all you can do, keep your spring crops a week or ten days behind those upon land which has not a bottom of clay. *Gravel* is warm, and, it would be very desirable, if you could exchange it for some other early in June; but, since you cannot do this, you must submit to be burnt up in summer, if you have the benefit of a gravelly bottom in the spring.

Having fixed upon the spot for the garden, the next thing is to *prepare the ground*. This may be done by ploughing and harrowing, until the ground at top, be perfectly clean; and then by *double* ploughing: that is to say, by going with a strong plough that turns a large furrow and turns it cleanly, twice in the same place, and thus moving the ground to the depth of fourteen or sixteen inches, for, the advantage of deeply moving the ground is very great indeed. When this has been done in one direction it ought to be done across, and then the ground will have been well and truly moved. The ploughing ought to be done with four oxen, and the plough ought to be held by a strong and careful ploughman.

FROM
W. N. HUTT.
STATE HORTICULTURIST

This is as much as I shall, probably, be able to persuade any body to do in the way of preparing the ground. But, this is not all that *ought* to be done; and it is proper to give directions for the *best* way of doing this and every thing else. The best way is, then, to *trench* the ground; which is performed in this manner. At one end of the piece of ground, intended for the garden, you make, with a spade, a trench, all along, two feet wide and two feet deep. You throw the earth out on the side away from the garden that is to be. You shovel out the bottom clean, and make the sides of the trench as nearly perpendicular as possible. Thus you have a clean open trench, running, all along one end of your garden ground. You then take another piece, all along, two feet wide, and put the earth that this new piece contains into the trench, taking off the top of the new two feet wide, and turning that top down into the bottom of the earth of the new two feet, and placing it on the top of the earth just turned into the bottom of the trench. Thus, when you have again shovelled out the bottom, and put it on the top of the whole that you have put into the trench, you have another clean trench two feet wide and two deep. You thus proceed, till the whole of your garden ground be trenched: and then it will have been *cleanly turned over to the depth of two feet.*

There is no point of greater importance than this. Poor ground deeply moved is preferable, in many cases, to rich ground with shallow tillage; and when the ground has been deeply moved *once*, it feels the benefit for ever after. A garden is made to last for *ages*; what, then, in such a case, is the amount of twenty dollars? It is well known to all who have had experience on the subject, that of two plants of almost any kind that stand for the space of three months in top soil of the same quality, one being on ground deeply moved, and the other on ground moved no deeper than is usual, the former will exceed the latter one-half in bulk. And, as to *trees* of all descriptions, from the pear-tree down to the currant-bush, the difference is so great, that there is room for no comparison. It is a notion with some persons, that it is of no use to move the ground deeper than the roots of the plant penetrate. But, in the first place, the roots go much deeper than we generally suppose. When we *pull up* a cabbage, for instance, we *see* no roots more than a foot long; but, if we were carefully to pursue the roots to their utmost point, even as far as our eye would assist us, we should find the roots a great deal longer, and the *extremities* of the roots are much too fine to be seen by the *naked eye*. Upon pulling up a common turnip, who would imagine, that the side, or horizontal roots extend to *several feet?* Yet I have traced them to the length of four feet; and Mr. Tull proved, that they ex-

tended to *six feet*, though he could not see them to that extent with his naked eye. But, though the roots should not extend nearly to the bottom of the moved ground, the plants are affected by the unmoved ground being near at hand. If this were not the case, plants with very short roots might be cultivated on a brick pavement with earth laid upon it to the thickness of a foot; and yet, no plant will live and thrive in such a state, while it will do very well in ground along side the pavement, though moved only a foot deep. Plants require a communication with, and an assistance from beneath, as well as from above, in order to give them vigor and fecundity. Plants will *live* and will *grow* to a certain extent in earthen *pots*, or in *boxes* made of wood; but there must be *holes in the bottom of both*, or the plants will die.

It is therefore of the greatest importance, that the ground be moved to a good depth, and he who is about to make a garden should remember, that he is about to do that, the effects of which are to be felt *for ages*. There is, however, one objection to trenching in certain cases. The soil may not only not be *good* to the depth of two feet, but it may be *bad* long before you come to that depth, and, in this case, the trenching, in putting the good soil at bottom might bring a hungry sand, or even a gravel or clay to the top, which must not be done by any means; for, even in the case of trees, they would perish, or become stunted, because their roots would not find their way from the bad soil to the good. In such cases the top soil must, in the trenching, be *kept at the top*; and, in order to effect this, your mode of proceeding, in the trenching, must be somewhat different from that described.

Your *first trench* must be opened in the manner described; but you must not then proceed to turn the *top* of the next two feet into the *bottom* of the trench. Let us suppose, now, that you have your first trench, two feet wide as before directed, open and clean. This being the case, take a foot deep of the next two feet all the way along, and, *for this once*, throw it *over the open trench* to add to the earth that you have already thrown out of that trench. Then you will have the *bottom foot* of earth left. Dig out this and turn it into the bottom of your open trench, and then the first trench will be half filled up, and you will have got your second trench open. Then go to a *new* two feet wide, that is the *third* two feet. Take the top foot deep off from this, and throw it on the *top of the* earth that you have just turned into the first trench; and then, where the first trench was there will be earth two feet deep; the bad soil at bottom and the good soil at top. Then you go on regularly.

At the *end* of your work, you will, of course, have *an open trench* and a half; and this must be filled up by carrying the earth, which came out of the first trench, round in a cart or wheelbarrow, and putting it into the space that you will have open at last.

It must be observed, however, that though the soil be good in its *nature* down to two feet deep, that which comes to the top in the first mode of trenching, will not be *immediately*, so good for *use*, as the soil which has been at top for ages. It is, in such a case of great advantage to place the old top soil at the bottom: because when roots find the soil good to such a depth, the plants and trees thrive and bear surprisingly. But, then, the new top soil must be exceedingly well *worked* and well and judiciously manured, in order to make it equal to the old top soil; which object is, however, very soon accomplished, if the proper means be made use of.

Thus will the *ground be prepared;* and here I close my directions with regard to the nature and preparation of the soil. But, it seems necessary to add a few words on the subject of *manures* as adapted to a garden. It is generally thought, and, I believe, truly, that *dung*, of any sort, is not what ought to be used in the raising of garden vegetables. It is very certain, that they are *coarse* and *gross* when produced with the aid of that sort of manure, compared to what they are when raised with the aid of *ashes*, *lime*, *rags*, and *composts*. And, besides, dung, in hot soils and hot climates, add to the heat; while ashes, lime, rags and composts do not; but, on the contrary, they attract, and cause the earth to retain moisture.

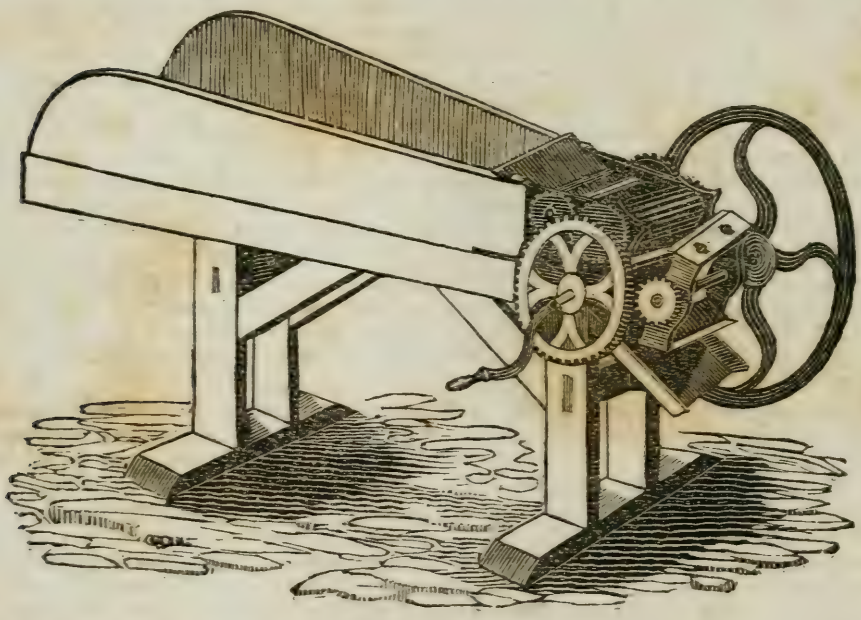
All the ground in a garden ought *always* to be good; and it will be kept in this state if it be well manured *once every year*. Perhaps it will scarcely ever be convenient to any one to manure the whole garden at one time; and this is not of so much importance. Clay, or any earth, *burnt*, is excellent manure for a garden. It has no seeds of *weeds* or *grass* in it. A compost, made of such ashes, some wood-ashes, a small portion of horse-dung, rotten leaves, and mould shovelled up under trees, round buildings, or on the sides of roads. All these together, put into a heap, and turned over several times, make the best manure for a garden.

A great deal more is done by the *fermentation* of manures than people generally imagine. In the month of June take twenty cart loads of earth, which has been shovelled off the surface of a grassy lane, or by a road side, or round about barns, stables, and the like. Lay these twenty loads about a foot thick on some convenient spot. Go and cut up twenty good cart loads of *weeds* of any sort, and lay these *well shaken up*, on the earth. Then cover the weeds with twenty more cart loads of earth like the former, throwing the earth on lightly. In three days you will see the heap smoke as if on fire,

If you put your hand into the earth, you will find it too hot to be endured. In a few days the heat will decline, and you will perceive the heap sink. Let it remain a week after this, and then *turn* it very carefully. This will mix the whole well together. You will find the weeds and grass in a *putrid* state. Another heating will take place, but less furious than the former. Turn it a second time in seven days; and a third time in seven days more. And by this time you will have *forty cart loads* of manure, equal in *strength* to twenty of yard dung, and a vast deal better for a garden, or, indeed, for any other land. It is not expensive to obtain this sort of manure; and such a heap, or part of such a heap, might at all times be ready for the use of the garden. When such a heap were once formed, some ashes, fish-shells or bones reduced to powder, or other enlivening matter, might be added to it, and mixed well with it; and thus would a store be always at hand for any part of the garden that might want it.

[Although intended for gardeners, farmers may derive many useful points from these observations; they could not well be more condensed, and the subject would not admit of division.]

STRAW CUTTER.



C. T. Botts, Esq. Editor of the Southern Planter:

Dear Sir,—Having used one of your STRAW CUTTERS for more than twelve months, I heartily unite with "Arator" in recommending it to the agricultural community, and should he not furnish you with his real name, you are at liberty to use mine in a request for a description and promulgation of it in the Southern Planter.

You may recollect that it was with some difficulty that I was induced to even *look* at your Cutter, being at that time under the impression that the old fashioned one I was using could not be excelled. A single *look*, however, served to convince me of my mistake and induce me to make the purchase—subsequent experience has only confirmed my opinion of its value, and I am satisfied that it has already saved me more than its cost.

I shall send you an order, in a few days, for one to go to Lynchburg, which I hope will be the means of introducing it in that section of country.

Very respectfully, &c. HENRY LUDLAM.

[Having received several other requests of a similar character, I have had a very handsome engraving of the Cutter prepared, which is so distinct as almost to explain itself.

The cutting part is made entirely of iron, compact and solid, finished in the heaviest and

most substantial manner; it may be packed in a box twenty inches square and sent over the world, without injury. You may screw it on any kind of box, or on a stump, if desired, being totally unconnected with the wood work. It consists of two perfectly plain, straight knives, which any blacksmith can make, screwed on a twisted head. By the revolution of a crank these knives are made to pass by a stationary cast-steel knife, from heel to toe, so as to cut upon the principle of a pair of shears. The feeding apparatus is most perfect, consisting simply of one cog-wheel working in another, without the use of a spring, or any thing that can by possibility require adjustment.

The superiority of this Cutter is supposed to consist in its extreme *simplicity*. The roughest and most careless hand may use it with impunity. I defy them to injure it except by gapping the knives, the restoration of which is within the power of the meanest capacity, since they are as easily ground as an axe or a chisel. Of the quantity of food that it will cut, and the manner in which it will cut it, I say nothing, except, that I keep by the side of it every other description of cutter of any note, that I can find, that the purchaser may judge for himself. Hundreds of testimonials can be adduced of its superiority, if necessary; but one from Mr. Thomas Sampson, of the firm of D. I. Burr & Co., so well known for their mechanical establishment in this city, is the one most relied on. Mr. Sampson is a Scotchman by birth, well acquainted with the agricultural implements both of Great Britain and America, of whose mechanical skill it is useless to speak. He pronounces the Cutter the best he ever saw.

The iron part alone without the wooden box is packed and sold for $30—complete $35.

P. S. A box, not exhibited in the engraving, is used to cover the knives and cutting part, which affords a complete protection against accidents, and also keeps the straw from flying.

The reader is respectfully referred to a voluntary communication on this subject, in the Whig of March 22d, from Mr. Garland Hanes, who unites in his own person the characters of mechanic and farmer, and who has been long celebrated as a maker of agricultural implements.]

TO THE READER.

Our subscription list is increasing so rapidly, and we have received from every part of the State so many flattering letters of encouragement and promises of support, that we have not hesitated at once, to give to our paper the form and shape that we consider worthy of the extensive patronage we believe it is destined to enjoy. In point of style and execution we think we may now say it has not its superior in any agricultural paper in the Union. The size is increased one half, which, in our opinion, makes it almost too large; certainly, no further extension can be desirable.

If we make such exertions to furnish a paper worthy of our good old State, will not our friends do something to assist us in the expense we incur? We know they will; we have already had the most substantial proofs of the fact. Of our personal friends we ask assistance for our own sake—of the farmers we ask assistance for the sake of the agricultural interest, and of the community generally we ask assistance for the sake of a dissemination of knowledge in their native State, which can only be effected in a cheap form, by bringing information within reach of the humblest means. When we ask an individual to assist us, we do not mean to ask him for his subscription: we mean to request him in the name of human improvement, to lend his assistance to our partly disinterested and wholly laudable enterprise. Every exertion upon the part of its friends, continued and repeated, is necessary to sustain a paper so handsomely gotten up, at so small a price. Let us get fairly under way, and we will trouble them no farther. If our own exertions then will not sustain us, we are content to sink. But, in the mean time, we earnestly request our well wishers to extend the knowledge of our establishment as far as their convenience will permit; hundreds of their neighbors, by a little exertion, may be induced to co-operate in a design, which must eventuate to the benefit of all; for without arrogance we think we may venture to say, that every subscriber must get more than his dollar's worth in the course of a year. It would be hard indeed, if, engaged as we constantly are, in reading, sifting and reporting, the product of our year's labor should not be worth more than one hundred times the price that is paid for it. Let it be remembered that every individual reaps the same benefit from our exertions as if we were laboring for him alone. Can it be then, that any one can go wrong in subscribing to our paper? Surely not; the investment is a good one, the only doubt can be between this and other periodicals. Here we have but little to say. Our exterior

knows no superior; and in point of ability we will not fear a comparison with the ablest periodicals in America, if we effect our object; that object is, to secure the assistance of the farmers of Virginia; for whilst the conductor of this paper places but little reliance on his own talent or experience, he believes that the farmers of Virginia possess more agricultural skill and information than belongs to any other State in this Union. This assistance may be elicited by zeal and industry, and in those qualities the Editor will yield the palm to no cotemporary.

POSTAGE.

We inadvertently in our last number gave our assent to the transmission of subscriptions at our expense. We find we were rather *green* in doing so. Postmasters, to whom as a class we beg to return our thanks for the courtesy we have received at their hands, will always frank such communications, so as to save the expense of postage to both parties. Our eyes were opened to the necessity of making this requisition by the following circumstances. A gentleman wrote to us requesting us to send our first number for examination; we paid 12½ cents for the request and complied with it. He then said he should like to see the second number, this also was sent, and another 12½ cents paid. This morning we received his enclosure of one dollar, for which we had to pay twenty-five cents, leaving us the nett sum of fifty cents for the year's subscription, a good deal less than the paper costs us.

To guard ourselves therefore against absolute loss, we are compelled to require that henceforth all letters, addressed to the Southern Planter, shall come to us FREE OF POSTAGE.

NEW SEEDS.

Through the politeness of the Representative from this District, we have obtained from the Patent Office a variety of seeds for distribution. These seeds have been sent home by the foreign consuls and patriotic travellers, and may be presumed to have been much esteemed in their respective countries—they are made up into small packages, some containing not more than half a dozen seeds. They will be distributed to any part of the State of Virginia, without regard to location, if early application be made at our office. The recipient will be expected to carefully cultivate and report to the Editor the character of the product.

If any gentleman is in possession of any rare and valuable seed which he is desirous of disseminating, either for love or money, we will be pleased to take charge of it on his own terms. We have already been promised a few seeds of a valuable winter melon, which we shall distribute amongst our friends. Whenever we furnish any kind of seeds *gratis*, we shall always expect the individual receiving them, if the product is valuable, to return us at least double the number the succeeding year for public use.

It may appear from our dates as though we had treated the month of March with utter contempt.

The truth is we got all wrong in consequence of an error in the first number, which was dated January instead of February. In this number, however, we have gotten right, and we hope henceforth to go on smoothly, issuing the paper regularly the middle of every month. Our design though, is still to furnish twelve numbers during the year 1841, so that the second volume may begin with January, 1842.

Farmers on a visit to our city, without regard to any thing but the fact that they are *farmers*, are invited to call at our office, where they may spend an hour to relieve the tedium that sometimes besets a traveller in a strange place. We keep files of our exchange papers, which shall always be at their disposal.

Having enlarged our paper, we have concluded to extend somewhat our miscellaneous head, which we find a favorite one with the public.

MISCELLANY.

How often do we see politicians of the present day advocating *general* principles that excite our warmest admiration, yet permitting their passions or prejudices to prevent their application to *particular* cases. Illustrative of this point is the following anecdote of

BISHOP PORTEUS.

In one of the debates in the House of Peers in 1794, a noble lord quoted the following lines from Bishop Porteus' poem on law:

"One murder makes a villain;
Millions, a hero! Princes are privileged
To kill, and numbers sanctify the crime.
Ah! why will kings forget that they are men;
And men, that they are brethren? Why delight
In human sacrifice? Why burst the ties
Of nature, that should knit their souls together
In one soft bond of amity and love?
They yet still breathe destruction, still go on,
Inhumanly ingenious to find out
New pains for life; new terrors for the grave.
Artificers of DEATH! Still monarchs dream
Of universal empire growing up
From universal ruin. Blast the design,
Great God of hosts! Nor let thy creatures fall
Unpitied victims at ambition's shrine."

The Bishop, who was present, and who very warmly advocated that particular war, was asked by a noble Earl on the opposite side, if he were really the author of the excellent lines here quoted? He replied, "yes my lord; but they were not composed for the present war."

SQUINTING.

Dr. Bolton, of this city, has recently performed, probably for the first time in this State, the highly ingenious and novel operation for squinting. It has been so completely successful, that it is now, (three weeks since,) impossible to distinguish which eye was formerly subject to this unsightly deformity; in addition to which the sight of the eye is much improved. The operation is entirely free from danger, and almost from pain; it occupies but two or three minutes, is adapted to any age, and is almost certainly successful. Who will fail to avail themselves of this opportunity, happily afforded, to obtain relief from that sinister expression always imparted by an obliquity of vision?

HANGING.

Richard Penn, Governor of Pennsylvania, at the time of the revolution, was in company with several members of Congress, one of whom remarked, that such was the crisis, "they must all *hang together*." "If you do not gentlemen," said Mr. Penn, "I can tell you, that you will be very apt to *hang separately*."

The American Farmer well remarks that the following anecdotes of ex-President Adams are worthy of being recorded:

"A worthy and respectable gentleman, somewhat impatient for office, applied to Mr. Adams to turn out a certain postmaster, and in the way of inducement, placed in his hands certain essays which that officer had written in opposition to Mr. Adams' election. Mr. A sent for the Postmaster General, and telling him he was urged to remove Mr. ———, inquired if he, having that Department in his charge, was satisfied with the manner in which the office was conducted. 'Perfectly well,' answered the Postmaster General. 'Then,' said Mr. A. 'tell him he has nothing to fear—he may write against me as much as he pleases.'

"On another occasion, he was waited on by a committee of his friends, most respectable gentlemen, with a request that he would remove a certain officer. 'O yes,' said he, 'certainly—it shall be done.' The applicants, delighted with the success of their mission, were about to depart, and indulge in mutual felicitations; when the President said dryly, 'But, stop gentlemen—*what has this officer done?* of what mal-feasance has he been guilty?' 'Oh, nothing, sir, in his official character; but he is *opposed to you!*' 'Oh!' said Mr. A. 'is that all? Well, if he is opposed to me, am I not opposed to him? If that be all, he must be let alone!'"

Upon a similar occasion, when application was made to the venerated Washington to eject an individual from office, whose crime was that he was opposed to *him*, he is said to have confounded the applicant by asking, if he could show that the obnoxious individual was opposed to the *country*.

JURIES.

In this country, thanks to the free character of our noble institutions, it is not often necessary to vindicate the independence of jurors. But even here, judges have sometimes forgotten the dignity and courtesy due to this humble, but favorite tribunal. Such an one was eloquently reproved in the following address, reported *verbatim* by the late Rev. Edmund Butcher. The whole circumstance proves that true eloquence is the child of nature.

A judge on the Northwest Circuit in Ireland tried an action for assault, brought by a neighboring land owner against a poor tenant who had resorted to this method of redressing wrongs of the most grievous character. The jury found him *not guilty*.

"The judge was enraged, and told the jury they must go back and reconsider the matter: adding, he was astonished at their giving such an *infamous* verdict. The jury bowed, went back, in a quarter of an hour returned, when the foreman, a venerable old man, thus addressed the bench: 'My lord, in compliance with your desire, we went back to our room; but as we there found no reason to alter our opinions or our verdict, we return it to you, in the same words as before—*not guilty*. We heard your lordship's reproof; but we do not accept it as properly applying to us. Individually and in our private capacities, it is true, we are insignificant men; we claim nothing out of this box, above the common regard due to our humble, yet honest stations; but, my lord, assembled here as a jury, we cannot be insensible of the great importance of the office we now sustain. We feel glad that we are appointed, as you are, by the law and the constitution, not only to act impartially between the king and his subjects, the offended and the offender, but to form the barrier of the people, against the possible influence, prejudice, or corruption of the bench; to which we do not wish to offer the smallest degree of disrespect, much less of insult; we pay it the respect which one tribunal should pay to another, for the common honor of both. This jury did not accuse the bench of partiality or oppression—no, we looked upon it as the sanctuary of truth and justice; still, my lord, we cannot erase from our minds the records of our school books. By them we were taught that kings and judges are but fallible mortals; and

that the seat of justice has been polluted by a Tressilian, a Scroggs, and a Jeffreys.' The judge frowned at these words, but the intrepid juror thus proceeded: 'My lord, I am but a poor man, yet I am a freeborn subject and a member of the constitution—nay, I am now higher, for I am one of its representatives; I therefore claim for myself and fellow-jurors, liberty of speech.'

"The judge here resumed his complacency and the orator continued his address: 'We have nothing to do, my lord, with your private character in this place, it is veiled by your official one: we know you here only in that of a judge, and, as such, we would respect you—you know nothing of us but as a jury; and in that situation, we look to you for reciprocal respect, because we know of no man, however high his titles or his rank, in whom the law or the constitution would warrant an unprovoked insult towards that tribunal, in which they have vested the dearest privileges they possess. We sit here, my lord, sworn to give a verdict according to our consciences, and the best of our judgments, on the evidence before us. We have, in our minds, discharged our duty as honest men. If we have erred, we are accountable, not to your lordship, nor to the king who appointed you, but to a higher power, the King of kings!'

"The bench was dumb, the bar silent; astonishment and applause murmured through the crowd, and the poor man was discharged."

In 1811 a gentleman made a bet of one thousand guineas, that he would have a coat made in the course of a single day, from the first process of shearing the sheep till its completion by the tailor. The wager was decided at Newbury, on the 25th of June in that year, by Mr. John Coxeter, of Greenham Mills, near that town. At five o'clock that morning, Sir John Throckmorton, bart. presented two Southdown wedder sheep to Mr. Coxeter, and the sheep were shorn, the wool spun, the yarn spooled, warped, loomed, and wove; and the cloth burred, milled, rowed, dried, sheared, and pressed, and put into the hands of the tailors by four o'clock that afternoon: and at twenty minutes past six the coat, entirely finished, was presented by Mr. Coxeter to Sir John Throckmorton, who appeared with it before upwards of five thousand spectators, who rent the air with acclamations at this remarkable instance of despatch.

The Editor of the Chicago Agriculturist and some of his readers seem to have gotten into a kind of *snarl* upon the subject of alcohol. He published, it seems, a household recipe in which alcohol was enumerated amongst the ingredients recommended. Some of his teetotaller readers took this in high dudgeon, and the Editor ingeniously defends himself on the ground that the *baking*, which is also recommended, will evaporate the alcohol. We do not think any of our readers are quite so fastidious, and we will be much obliged to our good housewives for their recipes, even if they should be dashed with a little spirit.

SMOKING.

The following ancient mode of smoking has at least the claim of sociability, and, we should suppose of economy, to recommend it. We think we have lately seen some *long nines* in the mouths of our city youngsters, that would be well adapted to this particular use of the fragrant weed.

Lionel Wafer, who published his travels upon the Isthmus of Darien in 1699, says of the Indians of that country, "Their way of smoking when they are in company together is thus: A boy lights one end of a roll and burns it to a coal, wetting the part next it to keep it from wasting too fast. The end so lighted he puts into his mouth, and blows the smoke through the whole length of the roll into the face of every one of the company or council, though there be two or three hundred of them. Then they, sitting in their usual posture upon forms, make with their hands held together a kind of funnel round their mouths and noses. Into this they receive the smoke as it is blown upon them, snuffing it up greedily and strongly as long as ever they are able to hold their breath, and seeming to bless themselves, as it were, with the refreshment it gives them."

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THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.* | Tillage and Pasturage are the two breasts of the State. *Sully.*

C. T. BOTTS, Editor. Opposite Merchants' Coffee House, Main Street.

Vol. I. RICHMOND, MAY, 1841. No. 4.

TOBACCO.

[Continued from page 34.]

TRANSPLANTING AND CULTIVATION.

I now come to the transplanting of the plant. Having kept the land in which they are to be transplanted clear of too much grass and weeds, it is now to be got ready for making the *hills*. The ground should be ploughed over, and if it should be *soddy* or lumpy, a heavy tooth harrow should be run over it. It is now ready to be laid off, which is done by running furrows from two and a half or three feet apart one way, and then turning and running furrows the same distance apart directly across the others, at what may be termed right angles; these furrows should be very shallow. Deep furrows make the hills too high, and when they come to be worked away, the plants are left standing as if they were on pinnacles. When making the hills, the top should be rounded off, so that the pat of the hoe will be no lower than any other part of the hill. This, though seemingly of little consequence, is more so than it appears to be at first sight. In times of heavy rains it prevents the water and sand from settling about the plant. Very often when plants have only been planted a day or two, there are heavy rains. If the hills are not made so that the water can run off immediately, the plants get covered up by dirt washing over them.

When drawing the plants from the bed, they should be drawn with as much of their roots as possible. A common table fork, by being run under their roots, enables a person to draw the plants with all the fine fibres to their main root. This mode should not be resorted to until the beds have been drawn several times, as the fork is apt to loosen the earth about the roots of the plants left in them, and consequently injures them; but towards the latter part of the planting time, when they will not be much longer wanted, the drawing with a fork will cause the late planting to grow off immediately. For plants drawn in this way, will, by leaving all their fine roots, commence growing much quicker after they are transplanted, than plants will which have been drawn by hand. Plants that are used to re-plant with should be drawn in this manner.

When the plant-beds are within a short distance of the tobacco land, the plants should be carried to it in baskets or tubs that will not hold more than a bushel; for by carrying them in large baskets they become bruised. The most convenient way is to haul them in a cart; but this way bruises them. The best way to manage when the beds are not too far off, is to set the most careful hands on the plantation in the beds drawing plants, while the smaller and less useful hands should carry the plants to those who are planting them.

When setting the plants in the hills, care should be taken not to put more of the plant in the ground than the root; that is, the plant should be set as near as can be as it was in the bed. By putting the plants too deep in the hills, they frequently stand some time and then rot off at the root; if they should not rot off, they will not grow for some time.

After the plants that have been transplanted have commenced growing, or in the language of planters, taken hold of the hill, weeding time commences. It is well not to weed tobacco too soon after it is planted; for if most of the grass seed do not get up before the hill is taken away, they will come up after the tobacco is wed out, and it will have to be wed again. But on the other hand too much grass ought not to be suffered to grow about the tobacco hills. For filth is thought to be the means of producing what is called the web-worm, which is sometimes very destructive to crops. Many planters are of the opinion that weeding away the hills in a short time after the plants are planted, will prevent the web-worm from getting in the crop. I have known some to have all the grass carried out of their tobacco ground (when their crop had become grassy) under the impression that that would prevent the web-worm. This is a very good way; for grass left in tobacco lands, even if it is no cause of web-worm, prevents the tobacco from growing kindly. When tobacco is being wed, too much of the hill should not be taken away, as it leaves the plant standing on a small spire of earth, and in dry weather exposes the root too much to the sun. Some planters always weed their tobacco plants without running a plough or cultivator in the space between the hills, because the plough and horse sometimes knock out of the hills some of the plants. This is a very laborious way, and a great deal of labor is lost. I have always found the most labor-saving way to be, to weed, when

the tobacco ground is not very grassy, around the plant only, and afterwards plough the land by running two furrows between the plants each way. While the plants are young, if the ground does not get too grassy, I do not plough until the tobacco makes some growth. If the land should become grassy soon after the tobacco is planted, the ground should be ploughed by running two furrows in each row, and should be wed afterwards across the way it was ploughed.

After tobacco has been wed out some time, it is very often necessary to go over it again with the hoes, and take from around the plants grass that was left by oversight. This should be done without taking away any earth from the plants. Two ploughings are enough for tobacco after it is planted. A cultivator should be used afterwards. When tobacco begins to cover the ground in which it is planted pretty well, it should be *laid by;* then it should be gone over again with the hoe and a hill put to it. Hilling tobacco is not absolutely necessary; for I have seen fine crops that were not hilled. The most advantage of hilling is, it keeps the tobacco from blowing down in storms.

There are two kinds of worms which have not been mentioned in this essay; either of which are at times troublesome to tobacco growers—the common ground-worm and the tobacco or horn-worm. The ground-worm is troublesome to early planted tobacco. I know of no way to get rid of this kind of worm only the old one, and that is to hunt around the plants and kill them.

This worm never cuts much after the 10th day of June; about this time they appear to have had their day and disappear. The horn-worm is troublesome from the time of planting a crop of tobacco until it is housed. A large gang of turkeys manage this worm pretty well. When the turkeys cannot manage these worms, they must be pulled off the tobacco and killed.

I will suppose the crop *laid by*, and that the next stage has arrived—that is the *topping* of it. There are two opinions about which is the best time to top. One opinion is, that the tobacco will cure a better color if the plants are permitted to get out in full blossom before they are *topped*. The other opinion is, that tobacco should be *topped* as soon as it shows an inclination to flower, or in the language of planters, as soon as it *buttons*. I think it should be always topped as soon it shows a button, for the growth of the top takes from the plant of tobacco so much that would have gone to it had it been topped early. The same remark applies to suckers that grow between the leaf and stalk. They should be taken out early; that is, they should not be permitted to grow large, for they take away much from the leaf which at this time is making its principal growth.

OVERSEERS' WAGES.

The following is only one of the many injudicious customs that continue to prevail in Virginia, notwithstanding that the circumstances, which gave rise to, and justified them, may long since have ceased to exist. It is well reproved by our correspondent:

For the Southern Planter.

Amelia, March 23, 1841.

Among the many causes which have operated greatly to the injury of the farming interest in Virginia, and aided, in no small degree, to exhaust our lands, may be mentioned the practice of giving overseers an interest in the crop, instead of stipulated wages. It originated, no doubt, under circumstances, which have long since ceased to exist in this part of Virginia; at a time, when our country abounded in lofty forests, and when it was the interest of the owner to get as much land cleared as practicable, and to make as much as possible from his land and laborers—an interest in the crop was consequently a great stimulus to the overseer—a strong inducement to increase the proceeds of the farm, regardless of the injury the land and hands were sustaining. Having few or no galls or gullies to reclaim; manure of little or no value, not worth the time or trouble of hauling out on the fields; all their efforts were directed to the *immediate* profit of the farm. But a great change has come over our State since that time, and yet we find many persons still keeping up the ruinous practice of giving their overseers a part of their crop, who, if disposed to do something more than merely obtain a home, for themselves and families, will so exhaust the land as to make it necessary for them to look out for a new place in two or three years, to carry on their land-killing system. Perhaps, in a future communication, I may undertake to show the great injury which result to both the employer and overseer from the above practice, in this our day, by driving many to the south and west, who otherwise might have been in a prosperous condition in our beloved Virginia; which might have been the garden spot of North America.

T. J. P.

Editor of the Southern Planter:

Dear Sir.—In the Medico-Chirurgical Review for January, 1841, I find the following interesting remarks on Broken Wind in horses. They occur in a paper read by Dr. Budd on emphysema or rupture of the air cells of the lungs, which he shows, from twenty dissections, to be the cause of Broken Wind in horses: "Mr. Jackson found, that of twenty-eight persons affected with this rupture, eighteen were the offspring of parents (father or mother) affected with the same disease, and that several of these had died in its course. In some instances, the brothers and sisters of these persons were also similarly affected. On the other hand, of fifty persons unaffected

with the disease, three only were the offspring of parents who had suffered from it; whence, it follows, that rupture of the air cells of the lungs is very frequently an hereditary disease. A fact important to man and horse, at all events to the breeder of the latter. Majendie attributes the difficulty of breathing to want of elasticity in the lungs." At all events there is sufficient evidence of the disease being heriditary to put breeders on their guard, a fact, I believe, not generally known to the community.

Respectfully, M. D.

For the Southern Planter.

THE INFLUENCE OF CULTIVATION ON VEGETABLES.

NO. III.

It is a universal law in both the animal and vegetable kingdoms, that individuals should resemble more or less those from which they come, and it might, perhaps, happen in the vegetable kingdom that the product of an individual would be exactly similar to the parent plant, if all the exterior circumstances of soil, of climate, of exposure, of position, &c. were the same for the product that they had been for the parent plant; but this is far from being the case; indeed, we find that on the same plant the buds are far from being identical, for there are some better placed for development, better nourished, and more exposed to the influence of light and heat than others; so that in these things we see a source of difference among the products of the same plant; we know, too, that the largest tubers among the product of a potato vine will produce, under the same circumstances, a larger variety of potatoes than the smallest ones; we likewise know that cultivators prefer some shoots to others for grafts and slips, in consequence of their ability to appreciate the differences resulting from the causes above alluded to.

The modifications in the products of plants are called *varieties*, when they are capable of being transmitted by a division of the plant, such as grafts and slips. The term *variations* belong to those slighter differences which result from external causes; thus there are plants producing large leaves and few hairs in light and dry situations, and bear small leaves and a great number of hairs in a shady and wet place. The cause of *variations* is very apparent, but the origin of *varieties* is more difficult to comprehend, unless it is admitted, as it is by the most learned, that these *variations* become more and more permanent in proportion as the causes, by which they have been produced, have acquired permanency, by the length of time they have existed, and by the intensity with which they have acted, until they acquire the power of being transmitted by division, and thus become the source of *varieties*.

Plants produced by seed differ more from the parent plant than those which are the result of division, as might be expected; since grafts and slips are an extension of the original plant, whilst the product of a seed is the development of a new being. Thus a great part of our fruit trees, yielding the most delightful fruit, are the offspring of seed trees producing indifferent fruit, and it is by *division* only that we perpetuate the fine varieties of fruit. From seed, however, we procure new and valuable varieties of plants by means of *cross-fecundation*, that is to say, by fecundating one plant with the pollen of another, from whose seed an intermediate race of plants is produced.

From what has been said it can be easily understood, that our ability to effect changes in plants depends upon the number of means by which they can be propagated—thus a dahlia can be propagated by seed, by division, and by tubers; the apple by seed and by division; and wheat by seed: and just in this proportion we have been enabled to effect and perpetuate varieties in these plants.

In my next communication I propose to give some account of double flowers, when I shall have executed, in an humble way, all that was promised in the first paper of

A NATURALIST.

BACON.

Every body in Virginia knows how to make good bacon, and if any of our northern friends will cross the Potomac, we will satisfy them that the art is confined to the South. But that they might, in the meantime, be enabled to know something of Virginia ham, of which they hear so much and see so little, we applied to a friend in Hanover, upon whom we could rely, for his mode of making and curing bacon. The following is the result of the application. As we expected, the directions are simple, clear, and concise, and we believe certain of producing good bacon.

If any of our whole *hog* friends have any amendments to make, we shall be pleased to hear from them upon this important subject.

To the Editor of the Southern Planter:

Dear Sir,—Feeling anxious for the success of your paper, which I think promises to be eminently useful to Virginia farmers, and deeming it incumbent on me, as a recipient of the benefit it confers, to aid in filling its pages, I will give you my mode of curing bacon. As bacon cannot be made good, unless the pork is good, I will give some directions for making pork. In the first place, your hogs should not be of a breed that carries too much fat, for in that case, the meat will be too gross and oily to make good bacon, (avoid the Chinese and No-bone.) Let the hogs when killed be about twelve or eighteen months old, and well fattened, principally on corn or meal, and weigh from one hundred to one hundred and seventy-five pounds. When you have killed your hogs

and had them nicely butchered, hang them up and let them drip until the next day—they will then be cold and stiff, and may be nicely cut out. Put to each joint a large tea-spoonful of saltpetre—rub each piece well with salt on both sides, and pack them away in a hogshead with holes at the bottom to let off the brine. Let it remain in this state for five or six weeks—then take it out, brush off the salt—rub it well with hickory ashes and hang it up in your meat-house, so that one piece shall not touch another. You should smoke it eight or ten days successively, and occasionally in damp weather. Your smoke had best be made of small chips, (avoid pine.) When the shoulders are small, I usually leave the spareribs in them.

I think any one who will observe the above directions will almost certainly have good bacon.

D.

Our readers must understand, that when our correspondent limits the weight of the hog to one hundred or one hundred and seventy-five pounds, he is speaking of what is provincially termed *family* bacon, that is, a ham, which the good Virginia housewife will permit to head her table. He does not speak of such as being most economical, or intended for the use of laborers.

For the Southern Planter.

Mr. Editor,—It is with no small degree of pleasure I inform you of the application of horse power to collecting and heaping woods manure composed of leaves and the skimmings of earthy particles and mould deposited on the surface of the land in the woods. A horse rake is made by boring eight two inch holes through a locust or gum log and putting teeth made of seasoned locust, drawn to a true point, and driven through from the top of the log. The teeth should be two feet long and the log should be eight inches in diameter if locust, or ten inches if gum, and three and a half feet long; the shafts should be just long enough to balance the rake, which falls back very much, from the great lean the teeth are obliged to have, to collect the trash readily.

A correspondent in the Farmers' Register, of last year, thinks, to rake and haul six loads, a good day's work for a hand, or twelve loads for two hands and one cart. With this rake, I raked myself fifteen large cart loads in an hour, and above one hundred loads a day can be collected. I set a higher value on this rake than I do the labor of a hand, for a year; for without it, I found it very troublesome work to collect and haul three loads a week, in good weather, and taking wet times after rains I calculated on two hundred and fifty loads a year; but now, I am obtaining at the rate of one thousand five hundred loads, and lose only such time as I can spare from the crops.

The portions of earth raked with the leaves, keeps them very compact and makes the whole rot much sooner than when gathered by a hand rake. Hoping that those in the vicinity of pine woods will avail themselves of this Planter's Aid, I am respectfully,

Yours, J. H. D. Lownes.

COUCHING.

From a highly valued medical friend we have received the following:

"A fine mare of five or six years old, in the possession of Mr. Perkins, of Fredericksburg, became blind from cataract in both eyes. Having confined her in a close pen, with a twitch on her nose, I stood upon a high bench and performed the operation of couching, as it is called, and succeeded completely in removing the cataract. About a fortnight afterwards, from being stone blind, the animal could see a corncob at the distance of two or three yards. She was too restive to allow me to remove the disease from the other eye. I attempted, after throwing her, but without success. There are many horses about the country which might be rendered much more valuable by this operation, and, no doubt, any physician would be willing to attempt it for the sake of keeping his hand in practice.

"In inflammation of the eye, after free bleeding from the neck and purging, it is an excellent practice, to take about half a pint, or a pint, every day or two from the vein of the face which passes down from the corner of the eye next the nose. This vein carries off the blood from every part of the ball of the eye, and the surrounding parts. A fine mare tore the front of the eye against a nail, causing severe inflammation, which threatened to destroy the eye and cause it to sink in the socket. This disaster was completely prevented by the treatment recommended above. If the inflammation proves obstinate, a rowel in the back of the neck will relieve it when nothing else will."

BREEDING.

An idea prevails amongst breeders that the first offspring is of little value, consequently, where the services of the sire are held at a high price, it is not uncommon to breed a valuable female, the first time, to an indifferent male, on account of the supposed economy. But the following well authenticated case, amongst many others, should warn breeders from such a practice:

When the Earl of Morton's Arabian mare was bred to the Quagga, not only did the offspring partake of the character of the sire, but when the mare was subsequently bred to an Arabian, by whom she had three foals, at different times, the first two continued to exhibit some of the distinctive features of the Quagga conjoined with the character of the Arabian.

Mr. Mayo mentions that a similar occurrence

was observed by Mr. Giles, in a litter of pigs, which resembled in color a wild boar, by whom the sow had had a former litter.

COB MEAL.

Of all the classes of which society is composed, the agricultural portion of the community should most encourage the growth and dissemination of periodicals devoted to their use. Other professions herd together, and are brought into daily contact, but the avocation of the farmer necessarily separates him, in a great measure, from the other members of his profession. Mechanics, who chiefly congregate in cities, learn from intercourse with one another any improvement that may have been made in their branch of business, and consequently, if such improvement be really substantial, it flies from mouth to mouth with the rapidity of lightning, and is quickly introduced into every part of the country. But the farmer is deprived of this opportunity of personal intercourse, which is productive of so much good, and he can only supply its place by substituting the pen for the tongue, and eyes for ears. He, who refuses to do so, is about as wise as the individual, who, for a few dollars, would agree never to hold a conversation with mortal man upon the subject of his profession.

How small a portion of our information can be derived from our own experience. Amongst the most practical, the *cheapest*, and by far the largest portion of knowledge must be derived from the information afforded by the experience of others. He is only as one of a million, all of whose attainments may be at his disposal. We ourselves have already hundreds constantly making experiments in agriculture for us, the results of which we are reporting; and yet, we have met with farmers whom we in vain entreated to pay us the pittance of a dollar for 288 pages of such reports—farmers, we mean, who took no other agricultural paper—we entreated them to subscribe for some agricultural work, (we will act as agent for any in the Union without charging a cent of commission) and we have been refused on the score of what, think you?—Economy. Really, they said, they could not afford to spend a dollar for any such purpose. At what rate must such a man estimate the improvement derived from his own experience, if he considers the results of so many of his co-laborers not worth a dollar? We cannot help considering such *economy* to be "*penny wise and pound foolish.*"

We sincerely believe that there are very few farmers who could make a better investment of a ten dollar note than to spend it judiciously in agricultural papers. The country is flooded with them; some of them edited with great ability. Amongst such it might appear invidious in us to attempt to draw distinctions, but we can safely say, that there is none upon our exchange list that is not worth ten times the price of subscription.

Into such a digression have we been unintentionally led, that, but for the title with which we happened to head this article, we should have forgotten what particular subject gave rise to these reflections. We remember now that it was the fact that the value of the cob of Indian corn should be so little appreciated notwithstanding its having been so satisfactorily ascertained.

The properties of this article have been frequently analyzed, and various results have been reported; but all concur in declaring it to be extremely valuable. Some have considered the nutritious matter of the cob to be one-third of that contained in the grain.

So satisfactorily has the economy of ground and cut food been established of late years, that it is now almost universally used. Every body knows, that the meal from the grain of the corn requires some separating admixture to make it a healthy food, and our merchant mills in this city sell enormous quantities of wheat bran for this purpose. Now, cob meal is found to be at least four times as nutritious as bran, and equally as separating, and yet, farmers throw away the corn cob and come to Richmond to buy bran.

Every corn mill should be furnished with a crusher or cob grinder, which may be added at an expense of about fifty dollars; and all the corn that is intended for feeding cattle should be ground up corn and cob together. At the *lowest* estimate, corn cobs must be worth six and a quarter cents a bushel at any mill door, where a crusher has been erected. If they can be obtained at any thing like that price, they might very profitably be made to enter largely into the feed trade. To the farmer, who would have them ground for his own use, they are worth double or treble that sum. How long will farmers continue to complain of *hard times* yet fail to avail themselves of the most obvious principles of rural economy?

TOBACCO.

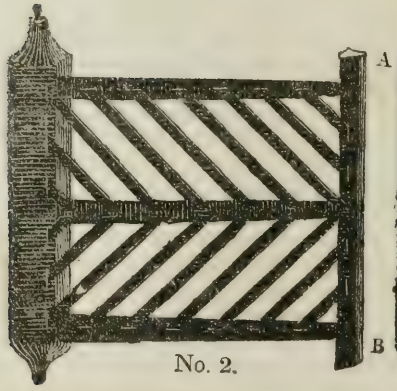
The true object in a choice of crops should be to select that which will afford, even by the highest cultivation, the greatest yield from a given surface. We do not mean yield in *bushels*, but product in *money*. A very observing and intelligent farmer in this neighborhood has suggested to us, that TOBACCO is a crop which very admirably fulfils these conditions. He thinks that it pays better for high cultivation than any crop he knows, and that it may be raised to great advantage in the neighborhood of cities or other places affording facilities of manure. His opinion is, that an acre of land, highly manured and well cultivated in tobacco will afford a greater clear profit in the market than any *root* crop that can be cultivated.

The idea is a novel one, and if our sagacious friend is right, may have a wonderful effect upon the system of cultivation in Eastern Virginia. We mentioned the subject to a very intelligent tobacco manufacturer of this city, and he thought very favorably of the notion. He said, that he had for some time been of opinion, that a change in the tobacco regulations in England would probably return the tobacco crop to the worn out lands of Eastern Virginia. That change and its supposed action he explained thus:

The manufacturing demand in this country is for a light silky tobacco, which will only grow upon new land, and cannot be made with manure. Formerly, in England, an excise duty was laid upon the tobacco, which was weighed after it had passed through the hands of the manufacturer, with a certain *fixed* allowance for additional weight, caused by the use of certain articles employed in the manufacture. This allowance was too small to justify the manufacturer in using much of these foreign substances, upon the excess of which he paid tobacco duty. Now this duty is removed, and after the tobacco comes into the hands of the manufacturer, it is not again visited by the excise officer. The consequence is, that the British manufacturer now uses immense quantities of heavy liquids, as molasses, &c. for which he gets paid as tobacco. Now the tobacco that will bear this kind of treatment is exactly the strong coarse article, produced upon highly manured land. Consequently, a new and very large market has been created for this hitherto, comparatively speaking, unsaleable species of tobacco.

We design to investigate this subject further. One fact is certain, that the most independent class in our community is the tobacco growers.

GATES.



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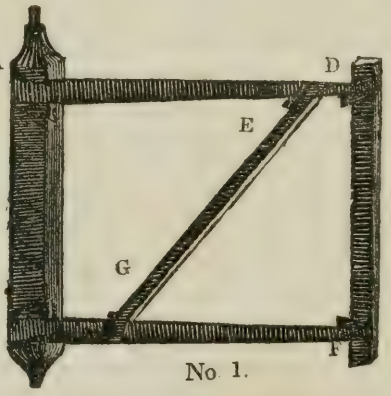


No. 1.

To the Editor of the Southern Planter:

Sir,—I have read with much interest some communications in your paper upon the important subject of farm gates. Although much has been written upon it, I do not think the subject has been entirely exhausted, and hope your readers have not become weary of it. Some excellent hints may be obtained from what has already appeared in your columns; but I have lately been using a gate, of which I send you a sketch and description, that I think, for economy and durability, far exceeds any other I know.

The cedar pole gate looks better on paper than in practice. Your engraver makes his poles much straighter, rounder, and more even, than nature, and much of the strength as well as beauty of the gate is dependant upon these qualities.

One of your correspondents very plausibly urges the necessity of a *light* gate. Now, sir, on the contrary, inasmuch as I derive strength from weight, I prefer a *heavy* gate, provided the weight is properly disposed. No. 1 represents the frame of such a gate; A B, the back upright, is a piece of timber 6 by 4, or even larger if thought desirable; A D and B F, the horizontal rails, are tapered, being 4 by 4 at the back, where they are united to A B, and 3 by 3 at the other end, where they join D F. The upright D F is also 3 by 3. The brace E G may be made of any size that is thought desirable. Here now, the leverage, which may be considered as operating upon the end farthest from the hinges, is, in a measure, counterpoised by the additional weight at the other end, and, so far, the liability to swag is prevented. Consequently, the narrower the gate, or the greater the overplus of weight at the hinged end, the more will this liability be counteracted. Owing to the necessary length of this leverage in a wide gate, it is impossible to *entirely* balance it, without perhaps making the hind post cum-

brously large; then, the strain comes upon the joints and upper hinge; these are the points of danger, and these it behoves us particularly to guard. The most secure union is formed by a *dove-tail* and a wedge. I never depend upon nails or pins. Every body, I presume, knows what a dove-tail is: it may be formed either by morticing and tenoning, or more readily, by halving. The key or wedge is driven underneath, so as to force the tenon up as tight and close into the mortice as possible, and if the wood should shrink, which it will certainly do if not thoroughly seasoned, the wedge may be driven again. Thus, you have a joint which cannot rack, because it is made to fit close and bear evenly at all times. For additional security, a small nail may be tacked through the wedge after it is driven up; but, with this exception, the frame is made without the use of a nail. The tops of the horizontal rails are all bevilled slightly inwards, so that the rain water may run off with facility, instead of settling in and rotting the wood. Upon this frame light palings may be nailed, either perpendicularly, or horizontally, according to the taste or pleasure of the maker.

No. 2 is a more expensive and showy gate, upon the same principle; where the single brace is supplied by the transverse slats, which are morticed flush, into the horizontal rails.

The first gate can be made in half a day by a good carpenter, or in ten hours by any man, who can use a saw, a chisel and a hammer, and if the joints are well made, the gate will last until the timber rots.

I prefer for my upper hinge, upon which much depends, an iron ring, embracing the upper and rounded part of A B, terminating in a bolt to pass through the gate post with a screw and nut on the opposite side. Nothing, I believe, is cheaper or better for a lower hinge than the end of a glass-bottle already recommended, provided the upright is large enough to cover it and keep out the water, which will otherwise settle in it, and rot the end of the upright. I generally, however, use a more expensive iron toe and ink.

Hoping, that, in presenting these views, I have been enabled to do something for the cause in which we are mutually embarked, I remain

Yours, J. B.

Of all the plans for gates that we have ever seen, we, by far, prefer this now presented by our correspondent, who is entitled to great credit for the philosophical and practical investigation he has bestowed on this subject. As far as some mechanical united with a little agricultural knowledge will give weight to the opinion, we express our conviction that, with some alteration in the brace, which we will notice hereafter, it is the most perfect gate we have ever seen. Mr. B. has left a small model at our office, about 10 by 12, which, although coarsely made, will bear a man's weight on the extreme end without yielding in the slightest degree.

HOGS.

There seems to be a universal propensity in the human mind, which can only be satisfied by the pabulum of continual exaggeration. As soon as one bubble becomes too expanded to last, another is immediately inflated. This shifting and exciting passion for various objects reminds us of the zest with which children pursue, in turn, their various sports or pastimes, and the readiness with which they abandon an old favorite for another which possesses the attraction of novelty. We have had the season for blooded *horses*, for blooded *cattle*, and this is the day for blooded Hogs. The whole country being agog upon the subject of this really useful, but not very poetical, animal, we have been at some little pains to gather the best information we could procure for the benefit of our readers.

Three questions naturally present themselves in this investigation:

1. Can our farmers raise pork cheaper than they can buy it?
2. If so, what is the best mode of raising? and
3. What stock is best adapted to our circumstances?

The first question has been long mooted in Virginia, and the prevalent opinion used to be, that the fertile lands and rich forests of Ohio enabled its graziers to furnish us this article cheaper than we could produce it. But a better system of farming has taught better things; and now, even in Eastern Virginia, the agriculturist seems satisfied of the economy of raising his own pork.

Mr. Colman, who is considered perhaps the highest authority in New England, lately declared that, even there, where the natural advantages must be much less than here, he was satisfied, from considerable experience, that when corn is seventy cents a bushel and pork will bring in the market six dollars a hundred, it may be fattened at a profit. Hogs, he remarks, are particularly valuable to the farmer on account of the large amount of manure which they may be made to furnish. If well supplied with raw material, a hog may be expected to produce ten loads of good compost manure per year.

Upon this first point, however, we must presume that our readers are satisfied without further evidence, that we may advance to the other two heads, which it would be needless to discuss, except upon this supposition.

On the second head, as to the mode of raising hogs, we presume much will depend upon situation. There are some, however, who maintain, that, even with the convenience of the finest mast it is cheaper to raise hogs in pens, where the manure pays for more than the difference in the cost of feed; but we are inclined to doubt this position, and think we have seen some situations, where nature afforded such abundant sup-

ply of the richest food, in the shape of mast, that it would have been little short of madness in the proprietor not to have availed himself of it. It may be, however, that, even in such cases, it would be better to collect and bring the food so abundantly afforded to the hog, than to expose the animal abroad in search of it. The hog is an animal in his nature proverbially sluggish, and it is possible, that when we minister to his laziness by waiting on him, he more than repays us for our trouble in the increase of flesh this indulgence of his habits may afford.

This, however, we consider beyond a doubt, that to attempt the raising of hogs, out of a pen, except upon the richest pasture range or the finest mast, is to throw away pretty much the whole cost of the animal. Any man had certainly better buy his pork than attempt any such system.

The answer to the third question will depend very much upon the solution of the second. In other words, the kind of hog selected should depend very much upon the treatment to which he is to be subjected. *Pen* hogs are not always *field* hogs. Our northern friends, we find, always estimate their hogs in proportion to the manner in which they thrive in *pens*. They know nothing of *old fields* or even of forests and marshes. Of their different varieties, the Berkshire, we presume, is beyond doubt the most *fashionable*; although, Mr. Colman says that a cross of the Berkshire with the Mackay has produced the finest and most thrifty race of animals that has ever come under his (Mr. Colman's) notice. Notwithstanding the popularity of this breed, which, for some purposes, we believe to have been most justly acquired, we think we could put a pure Berkshire in some places where he would find himself a very unequal match for his longer legged and more active brethren. For an active life, and to such most of the hogs in Virginia are consigned, we would prefer several crosses we have seen even with our native hog to the *pure* Berkshire. Our farmers should remember that the origin of this and all other improved breeds was the careful selection of such individuals as by nature possessed the properties required for the purpose for which the animal was designed. Now, if the Berkshire exactly suits our climate and other peculiarities, there can of course be no necessity for attempting any improvement; but, if our peculiar circumstances require properties which this stock, excellent in some respects, does not possess, why shall not we, by judicious crossing, create a stock which shall, as near as possible, answer our purposes?

We believe this object to be desirable, and we believe that it can be effected. Hence, we hope to see gentlemen procuring not indiscriminately any hog that may be called a *Berkshire*, but selecting with care such individuals, no matter under what name, as may possess, in the highest degree, the properties they most esteem.

We have been led into these remarks by no prejudice against Berkshires. On the contrary, we consider them a most valuable cross; but we do think that they are valued too indiscriminately, and that they are not always judiciously bred from. We would rather encourage a farther improvement of the stock, and would advise an eye to the *form* rather than the *name* of the animal.

There is something entirely new in the following. We like the originality of the idea, and in the name of the agricultural community, thank the Doctor for the application of professional principles to the sister science. We know of no other profession to which agriculture is as much indebted for scientific and practical improvements as to the country practitioner of medicine. We reckon amongst our most valuable correspondents some of that class.

We would however advise the Doctor, whilst we give him credit for the immediate communication of any observed *fact*, not to be too hasty in his *conclusions*. Our fruit trees generally, we believe, have been freer of late years from the ravages of the worm than they were formerly. If the cedar does no good, it certainly does harm; but, if subsequent experiments should confirm the Doctor's theory, a valuable discovery will have been made:

A NEW AND SUCCESSFUL MODE OF GUARDING PEACH TREES FROM THE WORM.

To the Editor of the Farmers' Register.

Fincastle, Va., Feb. 27, 1841.

Although my name is not on the list of your subscribers, I have had the satisfaction of reading some of the valuable articles which appear in your journal. Though unacquainted with you personally, as I feel some interest in your periodical, I will take the liberty of introducing myself, by giving a brief sketch of an experiment I have made, with success, on the peach tree; and if you deem it of any importance, or worthy the notice of your readers, you can give publicity to it.

As I consider the peach the most delicious fruit of our latitude, I have long since thought it a desideratum that it should be made independent of the destructive worm which kills the tree. I thought it practicable; and it occurred to me that there was in reach an antidote for the enemy to that luxurious growth. Having observed, in the practice of medicine, that the cedar berry was a powerful vermifuge, I transplanted cedar scions and peach scions together six years since, in the following manner: I set one of each in a hole, with the roots entangled and set close together, believing that the strong odor peculiar to the cedar would prove offensive and sickening to the worm, and thereby prevent its approach to the peach tree. Every circumstance seemed to conspire in favor of the experiment. There was no danger of the peach tree being choked

by the cedar, because the former is a rapid, whilst the latter is of very slow growth. The peach scions bore the second year, and have put forth their leaves as black as a cloud every season, and bore most luxuriantly every season, until the last, which was the sixth year. I have set out a number since, in the same way, which are all flourishing. I think a soil should be selected much mixed with sand, in order to prove successful. WM. N. ANDERSON.

From the tone of our agricultural papers, generally, one would infer that they considered a farmer designed for no other purpose but money making—they seldom treat him either as a man or as a Christian, but devote all their energies to the improvement of his pocket, to the utter neglect of his mind and social condition. Of all the professions that have arisen from civilization the farmer's has the greatest tendency to render its followers the most cultivated, refined and disinterested of mankind. The nature of their pursuits, whilst it affords them the very best opportunities for reading and reflection, frees them from the necessity of that daily system of bargain and intrigue to which most other classes are subjected, and which has such a powerful tendency to corrupt and degrade the nobler qualities of the human heart.

Notwithstanding that the direct tendency of his occupation is to elevate the farmer's mind, what evidences of refinement and cultivation, even of *comfort*, will you generally find about his abode? Are they to be found in a decaying house, a straggling fence, or a neglected yard?

There is much more in such things than a utilitarian might be inclined to suppose. No man ever saw a business prosper where there was a lack of good order, neatness, and arrangement. The homestead is generally a fair specimen of the farm, and where the dependant sees the principal indifferent to good order, it would be singular indeed if *he* was very careful in observing it.

Now although but little inclined in the general to find fault with the ladies when we have seen a dirty, neglected and uncomfortable residence, betraying a great lack of soap and paint, a yard without a shrub or flower to glad the heart or refresh the eye, we have sometimes been unable to repress the thought, that the mistress of that dwelling was wanting, not only in *taste*, but also in some of the most essential qualities of a wife and mother.

A man has other senses besides his appetite, and when he returns from a day of toil to the bosom of his family, he requires something more than a meal to appease his hunger. It is not less the *interest*, than the *duty*, of a wife to throw every charm around her husband's *home*. It should be to him the source of pleasure and repose—the recompense for his toils, and the faithful centre of his hopes when abroad amid the cares of the busy world. To throw around it this halo, and to impart this charm, the evidence of a tender and watchful spirit alone is necessary. Let him see his comfort provided for in his well ordered household, his senses gratified by the fragrance of carefully cultivated flowers, a general air of neatness and taste affording the most delightful contrast to the rude and dirty scenes into which his daily avocations may drag him, and our life upon it no ale-house can vie with such a home. A man will ever be found in the bosom of such a family, except when his business calls him forth to encounter the toils which the curse has entailed upon him. To produce this mighty effect is within the means of the humblest. A faithful heart and a ministering hand is all that is wanting to ensure the certainty of domestic preference in any individual, who is not already lost to all that is good and noble.

These remarks are not intended only for the wealthy and exalted. They are even more applicable to the poor and humble. If a man has nothing else to cheer and comfort him, there is still more reason in providing for him the charms of HOME.

We second our views on this subject by the following lively and sensible extract from the Western Farmer:

TO THE LADIES.

——— "No more toil
Of their sweet gardening labor than sufficed
To recommend cool zephyr, and make ease
More easy, wholesome thirst and appetite
More grateful," ——— *Milton.*

Since the editors of this work are doing so much to enlighten the stronger half of creation, as to the ways and means of securing the solids and durables of life, it is but fair that something should be said to enlist the attention of the gentler sex, in regard to the ornamental.

Let me be understood, then, as giving you, one and all, an earnest request to take up the science of cultivation, in what pertains to ornamental gardening. "Poh!"—says some housewife, looking up from a portentous pile of stockings—"what's the use of fussing and quiddling over plants and flowers?" "Dear me!"—says a young lady, between sixteen and eighteen, engaged in the momentous pursuits incident to that time of life—"how is any one to find time to attend to such things?" "Oh!" says another, "I admire plants and fine shrubbery, but then they are so expensive! one must pay so much for them, and have a man to tend them," &c. &c. And there are still others, we must confess, even among our own sex; who, should you show them the most peerless of flowers, in its fullest bloom, would tell you quite composedly, "La," that's only a rose, I've seen thousands of 'em!" To this last class any argument on the subject of

such very common affairs, we suppose would be entirely out of place.

But as ladies in general, and American ladies in particular, never do any thing, even to undergoing the tightest lacing, and wearing the thinnest shoes in the coldest winter weather, without having good and sufficient reasons to sustain them, we must of course give a few solid ones, as to why the pursuit of ornamental gardening is so particularly to be recommended to them.

In the first place it conduces to health. A gentleman of my acquaintance told me, that he would ride twenty miles to see one really healthy woman! and the phenomenon we think would be rare enough to justify the effort. Now all our treatises on the preservation of health, in recommending exercise as its "*sine qua non*," insist also, that exercise must be taken in the open air, and that the mind must be engaged and excited equally with the body. Now what occupation fulfils these conditions like gardening? Let any one practice it awhile out of doors, on a beautiful spring morning, with all the delightful excitement of laying out a border, sowing seeds, transplanting and arranging shrubbery, and they will find by the quick beat of every pulse, and the glow of the cheek, how healthful is the exercise. And as a sort of supplement to this part of my subject, I would add, that the pursuit of gardening leads directly to early rising, since some of its most important offices must be performed before the burning heats of the day come on. But "dear me!" says some young lady, "I never get up early; if that is necessary in order to raise flowers, I never shall do it!" Never fear, my fair friend, once get your heart and soul in the matter, and you will rise early, because you *cannot help it.* The image of your geraniums and your roses will haunt your morning pillow, and you will be down with the first dawn, to see if the blossoms they promised the day before, have stolen forth, like beautiful spirits in the stillness of night.

Then again, gardening is a graceful accomplishment for a lady, and has been held even from the time of mother Eve—if we may credit the saying of a very clever old gentleman, one Mr. John Milton, who wrote many handsome lines to that effect, and who was very much admired in times when *every body* couldn't write such fine poetry as they can now-a-days. We seriously think that it is every woman's province, as far as in her lies, to see that the outside of her dwelling is well arranged, trimmed, and ornamented, as to endeavor after bright brasses, pretty carpets, and handsome china, in the inside.

"What is the use of flowers!" exclaims a thrifty housekeeper, meanwhile busily polishing her fire-irons. What is the use of bright fire-irons, say we in reply? or of any fire-irons at all? could not you make a fire on two stones, that would keep you quite as warm? What's the use of handsome tablecloths and bed-spreads? one might eat on a board, and sleep under a buffalo skin, and not really starve either!

So much for the "utile." Perhaps many of our readers will remember how involuntary was the judgment they have formed, in riding by houses, as to the character of their inmates. When you see a house standing all alone, bare of shrub or flower, except perhaps some volunteer bunches of thistle and pig-weed; what do you infer of its inmates? And when you have passed even a log cabin, where the sweet brier was carefully trained around the door, while veils of morning glories and of scarlet beans, shade the windows, do you not immediately think of the dwellers there, as neat, cheerful and agreeable? This is more especially the case in regard to the homes of the poor. The credit of the rich man's grounds may belong to his gardener, but they who can keep no gardener, and whose simple flower-garden springs out of moments stolen from necessary labor, possess a genuine and cordial love of the beautiful, to render an humble dwelling so fragrant and fair.

BEST CEMENT FOR JOINING GLASS.

If the glass is not likely to be exposed to moisture, the pieces may be joined by a solution of equal parts of gum-arabic and loaf sugar in water: or if these are not at hand the white of an egg may answer nearly as well. But a strong water proof cement, that is equally transparent, may be made by digesting finely powdered gum-copal, in thrice its weight of sulphuric ether till it is dissolved. This solution may be applied to the edges of the broken glass, with a camel hair pencil, and the pieces must be put together immediately and pressed close till they adhere.—*New York Mechanic.*

FARM PEN.

C. T. Botts, Esq.—For the last five or six years I have adopted the plan of keeping my horses, cattle, hogs, &c. in a lot, around which are the stables, cattle shelters, beef pen, and also a shelter and separate pen for sheep, and one for hogs. There is a stream of water passing through this enclosure, and each of the little divisions runs to the water. This I consider a great convenience, as well as very beneficial to the stock. In these lots my cattle and horses are kept, from first November to first April, without ever being turned out. Corn stalks, leaves, straw, &c. are hauled in and spread, from time to time. The barns, stables, corn houses, &c. are ranged along the north and west sides, and the intermediate spaces are filled up with cheap shelters of plank. The quantity of manure is vastly increased, and, I believe, the cattle are in better condition in the spring, after the first winter, (the confinement does not agree so well with them at first,) than

when kept in moveable pens. Another advantage is, that a farmer can stand in one spot and see all his stock fed, without walking half a mile to see his cattle, and another half mile to see his hogs. Again, the different kinds of manure are mixed, and the whole contents of the farm pen are trodden, and may be used more advantageously. Salt, without stint, is kept in a trough in the yard, to which the stock have free access.

It is a treat to walk into such a place and see the milch cows regaling themselves on sugar beet and the greedy Berkshires devouring steamed roots, &c. all protected from the cold and rain.

Ed. Hill.

We receive a great many communications which lose half their interest from the anonymous signatures with which they are accompanied. Can not our correspondents be induced to follow the excellent example of Mr. Hill, and accompany their favors with their real names?

It is not the first time we have heard of Mr. Hill's barn yard, and, if we are not greatly misinformed, he is an enterprising farmer, whose example is worthy of imitation in many respects. We shall be pleased to hear from him whenever his leisure permits.

The following statement is only one of hundreds that we have seen of extraordinary yields of the corn crop to the north. Astonishing as they seem to us, there can be no doubt of their correctness. Thirty-eight barrels of corn to the acre! and this from "old field," by a judicious system of cultivation! How many acres are cultivated in Virginia, upon which there is bestowed at least one-third the labor appropriated to this crop, where the yield is perhaps, if the season is a good one—*five bushels* to the acre? We are almost ashamed to write it; yet, such we believe to be the fact. Thousands of acres in Eastern Virginia are annually ploughed, harrowed, planted, and hoed, which do not return more than a barrel to the acre. If by such cultivation a man can live, what could he effect by scrupulously saving every thing that would make manure, and applying it to a limited surface? What is there in Virginia that we should be content with such a miserable yield as frequently disgraces our fields? Our soil is certainly not inferior, because, we find our northern brethren outstripping us upon every variety of soil. Is our climate less congenial to the growth of Indian corn than that of New England? We know that an idea very generally prevails that the heat of our summers prevents us from planting close enough to obtain such products as we read of to the north. We hope, and incline to believe, that this is a popular error. When land in Virginia is well manured, and the planting at the usual distance, the *product* is, we think, equal to what we have observed to the north. We are confident that we have seen a field in Virginia that would yield forty bushels to the acre with as great a *product* upon it, as a field to the north, that would give ninety bushels; what was wanting in corn, was made up in stalk and fodder. Now, we are inclined to think that to exchange stalk and fodder for grain would be a good bargain, and this we think the northern farmer effects, in a measure, by close planting. But, says an old and experienced farmer, I have tried it, and when the drought came my corn *fired*. We know that this is the opinion of some of the best farmers in Virginia, and we are loth to hazard a conjecture in opposition to them. Yet we cannot help thinking that our eye frequently deceives us, and that if we would apply the bushel measure to our crops, we would find that the thickly planted, stunted stalks, from their greater number, yielded much more grain than their loftier and more scattered rivals.

Ashes or lime we are certain prevents firing, and in other crops, the best opinion seems to be, that the better the ground is shaded, the less the crop is affected by drought and heat.

If it is not too late, we should be extremely pleased to see some of our readers following Mr. Sheldon's practice, exactly, upon one or two acres, and reporting to us the result:

From the Cultivator.

CULTURE OF INDIAN CORN—GREAT CROP.

Messrs. Editors,—I send you a statement of Mr. Elias Sheldon, as delivered to the committee for awarding premiums on agricultural products, of the Cultural and Mechanic Art Society of Enfield, Somers, Ellington, and East Windsor.

S. D. Chapin.

"The land on which I raised my crop of Indian corn the season past, had been under cultivation a number of years, and is what is denominated 'old field.' It had the previous year been sown to rye, the stubble of which was turned in some time in the month of February, 1840. Nothing more was done to the land until about the first of May, when I carted upon the piece at the rate of twenty-five cart loads of manure to the acre, from my barn yard. It was spread, and the cultivator passed over it to cover the manure. The land was furrowed each way with the plough at about three feet distance. The hills were made where the furrows intersected each other. A part of the piece was manured in the hill with well rotted manure, and a part with plaster of paris. The corn was planted on the 17th day of May last, dropping into each hill four kernels of corn. The corn was carefully hoed twice, and at each hoeing the cultivator was used by passing it between the rows each way. At the second hoeing unleached ashes were dropped about the hills of corn at the rate of half a pint to a hill. The third hoeing was omitted, but the cultivator was used as before by passing each way between the rows. The produce was at the rate of one hundred and ninety bushels of ears of corn,

weighing forty-five and a half pounds per bushel, and two cart loads of pumpkins per acre.

ELIAS SHELDON.

Somers, Conn., Jan. 30, 1841 "

From the Farmers' Cabinet we copy the following, which, if correct, is valuable both as a preservative of health and leather:

WATER-PROOF DUBBING FOR LEATHER.

KEEP YOUR FEET DRY AND HEAD COOL.

To render leather water-proof, and at the same time to preserve its elasticity, is a matter of great importance, as it increases its durability, and protects those who apply it to shoes or boots from the mischievous effects arising from damp or wet feet. The following recipe followed out carefully, it is believed, will effect this object:—Take a pint of linseed oil, two ounces of bees-wax, two ounces of spirits of turpentine, and half an ounce of Burgundy pitch, and slowly melt them together, continuing to stir them so as thoroughly to incorporate them, being careful not to set the mass on fire, as the ingredients are all combustible. When this compound cools, it will be found to be about as elastic as leather ought to be. If it were harder, it would cause the leather to crack or break when bent; and if it were softer, water would enter and wash it out. To apply it, re-melt it, warm the shoes or boots, and put it on with a small brush, or a sponge, or piece of cloth tied on the end of a stick; continue to warm it in till the leather is well saturated with it, and particularly the bottoms of the soles and heels. It should always be applied when the boots or shoes are new, and then lay them by to season for some time before wearing. Leather thus treated will be found impervious to water, and will wear twice as long as that to which it has not been applied. The writer has used this article for many years, and can testify to the great benefits derived from it; and he has no doubt but his shoemaker's bill has been reduced to one half by the use of this composition; and what has been saved in doctors' bills he is unable to estimate.

Common grease applied to leather tends to rot it, and it is soon washed out in wet weather

O.

N. B.—After shoes have been worn a short time, the leather will take blacking and shine as well as if the composition had not been applied to it.

MANURE.

There is no one point that we more anxiously desire to impress upon the minds of our readers than the necessity of saving and making manure. We shall continue to urge it in one form or another in every number. Farmers are heedlessly permitting quantities of this valuable article to slip through their fingers, whilst, to them it is worth almost its weight in gold. Strange inconsistency! They will hold on with the gripe of a demon to a silver dollar at the very time that they are permitting ten times its value in manure to "waste its sweetness on the desert air." Because its value is somewhat remote it is always underrated. But although not immediate, it is not the less certain. If this fact could only be borne in mind, the eye of avarice would detect sources of gain in a thousand things that are now considered as worse than useless.

Mr. John Young, in his letters of Agricola, says, "The carcass of a dead horse, which is often suffered to pollute the air by its noxious effluvia, has been happily employed in decomposing twenty tons of peat earth, and transforming it into the most enriching manure." And again, "Liquid manures are of the same value as solid, and one ton of the solid dung will make four tons of compost, and four tons more may be made from the urine discharged by the cattle in the same given time."

To the correctness of the following article we yield our entire assent, having attempted before to enforce several of the views here taken:

CAPITAL.

There is no mistake more common nor more injurious, than that of supposing that the more land a man holds, the greater must be his profits, for the profit does not arise from the land itself, but from *the manner of using it*; for the best soil may be made unproductive by bad management, while the worst may be rendered profitable by the opposite course; *but without sufficient capital no land can be properly cultivated;* at the same time, there is nothing to which capital can be applied with greater certainty of a fair return for liberal expenditure, when correctly employed, than land. In fact, assuming always that the expenditure be directed with judgment, it will be found that the profit upon the outlay increases in more than a proportionate degree to its amount; thus, supposing twenty-five dollars be the lowest, and fifty the highest sum that can be employed in the common culture of the same acre of land, it is more than probable that if twenty-five dollars return at the rate of ten per cent., the fifty dollars will yield twenty, or any intermediate sum, at the same progressive ratio. And admitting this to be true—and it is presumed no experienced agriculturist will doubt it—it follows, that a capital of five thousand dollars, expended in the cultivation of two hundred acres, will only yield a profit of five hundred dollars, while, if applied to no more than one hundred acres, it would produce one thousand dollars; therefore, it is evident that his profit would be increased by diminishing the quantity of his land. Many a man has been ruined by a large farm, who might have acquired a competency with one of half the size. Most farmers are anxious for large occupations, and many are thus betrayed into

the error of taking a greater quantity of ground than they have the means of managing to advantage; some, in the delusive hope of acquiring those means by future saving; others, from the vanity of holding more land than their neighbors: hence arises deficiency of stock, imperfect tillage, and scanty crops, with all the consequent train of rent in arrear, wages ill paid, and debts unsatisfied—distress, duns, and final ruin! While he, who prudently commences, with only such a number of acres as he has the power of cultivating with proper effect, is certain of obtaining the full return from the soil, and not being burdened with more land than he can profitably enjoy, his engagements are within his means; and thus, while enjoying present ease of mind, he lays the surest foundation for future prosperity. It therefore behoves a man to weigh well the charges with his means, and never allow himself to be seduced by any ideal prospect of gain, into the imprudence of entering upon a larger farm than his property will enable him to manage with the spirit necessary to insure success.—*British Husbandry.*

BERKSHIRE SOW.

Mr. Botts:

Dear Sir,—Above, you have a portrait of a Berkshire sow, eleven months old, with her first litter of pigs, now the property of J. M. Sublett, Esq. of this city. She boasts the old Virginia cognomen of "Suke." The drawing and engraving are the first attempt of Mr. John S. Gallaher, Jr., a young gentleman who has exhibited the most extraordinary talent for an art to which he intends to devote himself. It is a good likeness and not flattered.

Suke is by the boar "President," (of whom you have a caricature in your February number) lately sold by me to the Rev. J. H. Turner, out of a sow obtained some time since of Caleb N. Bement, Esq. of Albany. She is supposed to weigh about three hundred pounds, certainly not less. President was sold by me only in consequence of my desire to avoid breeding in and in.

I have now stock from Bement, and a young boar from John Lossing, Esq. of Albany, some from B. Brentnall, of New Jersey, the first importer of black Berkshires into the United States, and stock from Col. Williams's imported boar, which took the premium at the American Institute, I believe, in 1839. So that persons, who wish to obtain genuine Berkshire pigs of different crosses, can do so of me in the fall, every one of my spring litters being already engaged.

Having gone largely into the business of breeding the Berkshires, I feel some diffidence in speaking of their superiority over other breeds; and therefore expressly desire that all persons may take what I say of them for exactly what they may think it is worth, under such *interested* circumstances. To all such communications I shall, at all times, affix my proper name, so that the author may be known.

I believe that, with half the quantity of corn,

the Berkshires will make good pork, and more of it than any other breed I have ever known. Upon good grass they will require no feeding. They are the most quiet hogs, and the best nurses I have ever seen. I have never known one to jump a fence eighteen inches high, and one of the greatest recommendations to Virginia farmers is, that a single cross of the Berkshire upon the common stock immediately changes and improves the character of the offspring. To show the additional weight and size obtained by the improved cross, I would refer you to a communication in the March number of the Farmers' Register, page 174, where the weight of several large lots in Ohio of the cross are reported to have averaged from two hundred and fifty to four hundred and thirty-five pounds, at sixteen and twenty months old. In the same article, one single cross, under the most unfavorable circumstances, is reported to have effected an increased average of one hundred and two pounds over the weight of the original stock. E. Phinney, Esq. of Lexington, Massachusetts, sent to market, on 22d February last, fifteen half Berkshires, from fifteen to eighteen months old, of which the total weight was seven thousand nine hundred and fifty-eight—an average of five hundred and thirty and a half pounds. Some of those weighing upwards of five hundred pounds were only fifteen months old.

In a letter from John Mahard, Esq. of Cincinnati, one of the largest pork packers in that city, it is stated that the half-blood Berkshires are found to stand driving better than any other breed of hogs.

These facts are sufficient, I presume, without thousands of others that could be adduced, to establish the superiority of this celebrated stock.

Yours, A. B. SHELTON.

We have seen the *lovely creature* whose portrait Mr. Shelton has determined to preserve. The likeness is excellent, and we are glad to find that Mr. Shelton has done justice to the promising young artist to whom her ladyship *sat*. She is indeed a beauty, and her appearance alone commands a ready sale for her offspring. Mr. Sublett informs us that he finds it impossible to supply the demand.

A remarkable fact has been brought to our notice, which exemplifies the value of this cross. We have been shown the litter of a common sow by this boar, President, the sire of Suke, and a preceding lot of pigs from the same sow by a common boar. The disparity is astonishing, so much so, that the last litter was sold at five dollars apiece, whilst the first could find no purchasers at one dollar. This reminds us of Mr. Colman's remark that, "the change which had taken place in the hogs of Albany, which are allowed to run at large in the streets, since the introduction of the Berkshire, was most remarkable; instead of a lean, hungry, prowling, noisy race, objects of universal disgust and dread, there were now every where to be seen in the streets and styes of that city, fine sleek and plump pigs, which appeared to be kept with the greatest care and liberality."

DR. HORTON'S PRIZE ESSAY.

The spirited Editor of the American Farmer offered a premium for the best essay upon the renovation of exhausted soils, which was awarded to Dr. Horton, of Maryland. The successful article, which was of course published in the Farmer, has been very severely criticised by the able Editor of the Register. The essay and criticism are both devoted, chiefly, to the Doctor's theory of the action of lime upon the soil, which certainly differs from that which is so great a favorite with Mr. Ruffin. The latter gentleman, we think, seems rather too irritable upon this subject, and a little too jealous of foreign invasion upon a province, which he has taken under his special care, and in which he has certainly done himself great credit. The terms he applies to the Doctor's production are not the most courteous and liberal, and such severity of criticism, we think, has, at least, no tendency to elicit agricultural communications. That an editor should refute, where he does not approve, is not less his *privilege* than his *duty*—but argument is always better than invective, and sound reasoning more effective than abuse.

Our own opinion, if we may be allowed to express it, is, that the theory of neither gentleman, although they are both entitled to great credit for ingenuity, is sufficient to account for all the facts attending the operation of lime. Indeed we know of no important point in husbandry that we conceive to be still buried in such profound mystery as the varying action of lime and gypsum. We are obliged therefore to any who will advance even a plausible opinion upon this subject, although, so long as those opinions are not satisfactorily confirmed, we may not trouble our readers with them. We would at any time prefer a statement of actual *results* to mere opinions of the *modus operandi*. The latter, no doubt, are frequently valuable, but we think it hardly worth while to trouble the general reader with a statement of complex, conflicting, and unsatisfactory opinions of the *manner* in which a substance acts, whilst the facts attending its operation are not yet clearly developed. For this reason, we have purposely abstained from any participation in the lime theories of the day. There is none of them so clearly vouched as to give it, in our opinion, greatly the preference over its fellows, and to become acquainted with all that are advanced, would require, we believe, more time upon the part of our readers than they are willing to devote to the object. We hope, however, that the time will shortly come, when some satisfactory knowledge will be obtained upon this important subject, which we shall avail ourself of the earliest opportunity to impart to our readers. In the mean time, we shall take care to publish from correspondents, or copy from other papers, all the *well authenticated facts* that we meet with upon this subject, which we believe

to be one of primary importance to agriculture.

But to return to Dr. Horton, and his abused, successful essay. The Doctor gives his assent to the opinion, that lime, dissolved by rain water, actually becomes the food of plants, and very modestly advances an idea, that it may loosen a close soil, and close an open one, by its power of repulsion and attraction for clay and sand. He totally rejects the idea of its neutralizing an acid in the soil.

Another opinion that the Doctor advances is, that the morus multicaulis, from its rapid growth, is calculated, if the branches are intertwined and properly directed, to make an excellent hedge for fencing. As we have before intimated in this number, we deprecate, in the present situation of our country, the use of any live fence, whose roots, we believe, would materially interfere with the prosperity of the adjoining crop.

WHEAT.

The people of Virginia have but little right to expect instruction from a citizen of New Hampshire on the cultivation of WHEAT; but we extract the following remarks from a letter of Mr. Th. Fuller's to the Editor of the Farmer's Monthly Visitor because although we think the writer has fallen into some errors, yet the piece bears the impress of an observing and practical mind. His preparation of seed is exactly that we have already published from Cobbett as applicable to garden seeds. His plan of weeding is beyond doubt beneficial if it does not "cost more than it comes to." The time of harvesting is contrary to the advice of some of our best farmers, but has been advocated by others. We beg to call attention to the subject:

PREPARATION OF SEED TO PREVENT SMUT.

The preparation of the seed I take from an English account published some years since, which practice I have adopted for five or six years past with success, and I do think much of it.

Make a brine of common salt strong enough to bare up a hen's egg: then put in your wheat not more than the brine will cover. Stir it and skim as long as any thing will rise. It will float off all the light kernels of wheat, oats, light kernels of cockle, smut, or any thing that is injurious to the seed. Then take the wheat out, and put into the same brine another lot, and so on till you have cleaned all you wish. After washing put the wheat into a heap—let it lay six hours—then mix a sufficient quantity of dry ashes, plaster of paris or lime; then immediately sow your wheat. I am very particular as to time.

The result is, I have not found but two smut heads since I adopted this method, and I think it beneficial in preventing worms from destroying the seed, as well as adding to the growth of the wheat. The English account says, (as well as individuals with whom I conversed from England) that it has been tried on a farm for forty years, and was always successful. More proofs from the same account I might offer; but I am satisfied from my own experience of the beneficial results.

WEEDING WHEAT.

I weed my wheat always twice. The first time when the wheat is three or four inches high; then again just before it begins to head out. I use an instrument called a grub. It is like a cabinet maker's gouge, about one and one-fourth of an inch in diameter, with a socket into which I insert a handle, say four or five feet long. With this instrument one man may go over a large piece of ground in a day. The method is, to take the grub and cut off a thistle, dock, or any thing that is injurious to the wheat at the surface of the ground, and leave it on the spot where it was cut off. A field that has had this dressing will look much better: weeds always take the start of the wheat and retard the growth. This practice always pays the farmer a great price for his labor.

HARVESTING WHEAT.

I commence cutting my wheat when it is very green, when I find the kernel is out of the milk and about as hard as flour dough, which you may know by squeezing the kernel between your fingers. I then cut it as fast as I can, either in fair weather or not. I do not let it lay in the gavel on the ground exposed either to the sun or rain, but bind it up in single bands near the but, set it up in stooks of eight bundles on the ground in the form of a pair of rafters, the buts, as far apart as possible with two sheafs put on the top for protection. In this way it will dry very quick, and the sap in the straw will afford nourishment to the kernels sufficient to prevent it from shrinking too much. By this method I find the kernel retains all its goodness, and the straw makes excellent fodder for neat stock, because it retains all the sap that the wheat does not absorb. Wheat cured in this way thrashes very easy, and will not shell out by carting to the barn.

I think farmers are not aware how green they may cut their wheat, and what a saving they may have in the quality of wheat and straw. They have only to try this method, and I feel assured they will find it to their interest.

QUALITY OF MILK.

Several cups have been successively filled while milking from one cow, producing the following results: in every case, the quantity of cream was found to increase in proportion as the process of milking advanced: in different cows, the proportion varied, but in the greater number the excess of cream in the last cup as compared with the first, was as sixteen to one; but, as in some cases the difference was not so much, a

fair average might be considered as ten or twelve to one. And the difference in the quality of the two sorts of cream was no less striking, the cream given by the first drawn milk being thin, white, and without consistence, while that furnished by the last, was thick, buttery, and of a rich color. The milk remaining in the different cups presented similar differences, that which was drawn first being very poor, blue, and having the appearance of milk and water, while that in the last cup was of a yellowish hue, rich, and to the eye and taste resembled cream rather than milk. It appears, therefore, from these experiments, that if, after drawing seven or eight pints from a cow, half a pint remains in the udder, not only almost as much cream will be lost, as the seven or eight pints will furnish, but of such a quality as gives the richest taste and color to the butter. This fact has been corroborated by chemical experiments, and holds good with respect to the milk of all other animals.—*Blacher's Essay.*

HESSIAN FLY.

A correspondent writes us, that he is in possession of what has been denominated "Fly-proof wheat," which he has sowed, and of which he promises to give us the result, although he himself seems to be not very sanguine of its capability to resist the attack of the Hessian fly. He concludes, however, by saying, "I have understood lately that this wheat has been introduced, (from I know not where or how) by Mr. John Gray, of Traveller's Rest, and is much sought after."

Like our correspondent, we should form very little expectation of beneficial results from *fly-proof wheat*, in the abstract, but the name of Mr. Gray connected with it invests it with an importance to which we should not, otherwise, consider it entitled. Will Mr. Gray be kind enough to impart to us his knowledge of this article, whether for good or for evil? An extension of a valuable article may be effected, or inconvenience and loss of time prevented.

See what Arthur Young thinks of the adaptation of America to the raising of sheep. He says:

"In the culture of grass for pasturage, preparatory to gain, the profit of sheep husbandry in America must be very great: there is every advantage of soil and extent of farm, and no drawback but that of labor—and pasturage demands scarcely any labor; so that, if there is one system that squares more than another to the circumstances of America, it is the adoption of a course that embraces the culture of grasses most extensively. Wolves and dogs are named as a reason for not keeping sheep, but they abound all over Europe—and so do sheep. No wolf or dog could get into my sheepfold by night, and by day a watchful shepherd is a sufficient protection. While shep are kept by *dozens*, such objections may hold good; but when by *hundreds* and *thousands*, they instantly vanish. Surely the value of wool must instigate to an increase in the breed of sheep, even if it be for exportation, the freight, when it is pressed into a small compass being a trifle, and the fleece alone, from extensive American lands, without reckoning the carcass as any thing, must be more valuable than the *profit* on a crop of wheat at a dollar a bushel, especially on lands producing white clover spontaneously.

"Suppose, on some of the lands which might be bought for five dollars an acre, or twenty shillings sterling—the rent of this is, say twenty-five cents: now such land, by carrying but one sheep an acre, producing five pounds of wool, worth only twenty-five cents per pound, and the mutton doing no more than paying for losses, shepherding, &c., here is a profit such as corn cannot rival—five rents paid by wool alone! But the mutton of well fed sheep, if carefully salted, would find a ready market, if not at home, in the West Indies; and if sold at two cents a pound above expenses, the object, on a large scale, would be highly important."

FENCE.

A Mr. Chatfield recommends, in the Cultivator, a fence to be made by planting poplar trees, fourteen feet apart, and morticing rails into them whilst they are young. This will, no doubt, form a very ornamental fence, and, with a longer lived tree than the poplar, a very lasting one. Where a line of trees is planted, for ornament at the foot of a yard, if it was thought worth while, something might possibly be saved by making use of it for such a purpose. But to plant trees of any kind around a field for the purpose of making fence posts of them, by way of *economy*, would be, we apprehend, to use a homely phrase, to "stop the spiggot and open the bung," inasmuch, as the loss of product from the shade and the roots of the trees would be sufficient to erect a fence every year.

KIDNEY WORM IN HOGS.

J. P. Rutland, in the Western Farmer, asserts that an infallible remedy for this disease may be found in the use of corn soaked in lie.

LICE ON CATTLE.

At this season cattle frequently droop, look rough, and fail to shed, without the owners being aware that it is owing to the fact of their being infested with lice. To remove these troublesome vermin many expedients are recommended—amongst the simplest is the following, from the Boston Cultivator:

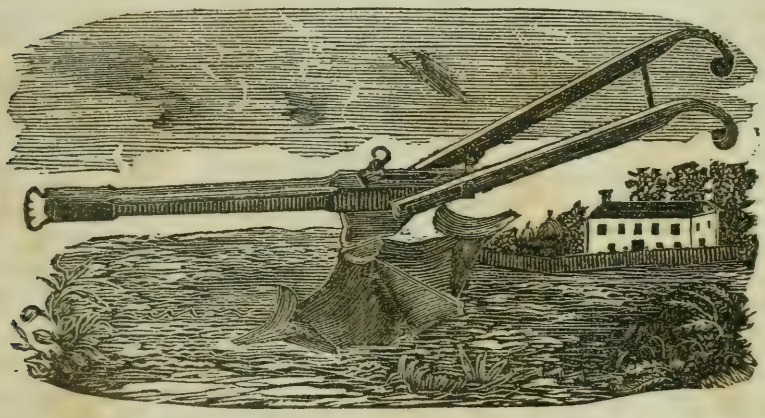
"To rid cattle of lice, sift wood ashes on their heads and backs, when the weather is dry."

TO PREVENT INSECTS CLIMBING UP FRUIT TREES.

At a late meeting of the Entomological Society, Mr. James H. Fennell communicated the following successful mode of preventing insects ascending the trunks of fruit trees. Let a piece of India rubber be burnt over a gallipot, into which it will gradually drop in the condition of a thick viscid juice, which state it appears it will always retain; for Mr. Fennell has at the present time some which has been melted for upwards of a year, and has been exposed to all weather without undergoing the slightest change. Having melted the India rubber, let a piece of cord or worsted be smeared with it, and then tied several times round the trunk. The melted substance is so very sticky, that the insects will be prevented and generally captured, in their attempts to pass over it. About three pennyworth of India rubber is sufficient for the protection of twenty ordinary sized fruit trees.

If the fact be as stated above, (which, by the by, we have some reason to doubt) that India rubber, when melted, forms a viscid matter, *which will always retain its viscidity*, a great desideratum has been obtained, and the article will be applicable to other objects beside the one here mentioned. But even for this purpose, it may be worthy of note, since the use of Dennis' patent trough, much approved at the North, has shown that any thing, which arrests the upward progress of the insect on the exterior, saves the tree. If effectual, no contrivance can be simpler and cheaper than the one recommended.

TINKLER'S PATENT PLOUGH.



A specimen of this improved implement lately introduced to the public, is now to be seen at our office. Mr. Tinkler, we feel assured, has, by dint of perseverance and great sagacity, succeeded in effecting a most valuable improvement in this indispensable implement of husbandry; and that upon entirely novel and original principles.

In the first place, we believe the shape of his mould board, which cannot be understood, by description, to be the best we have ever seen. Secondly, by causing the handles and beam to revolve upon a double mould board, he has united a right and left hand plough upon the simplest and cheapest principles. And thirdly, he has adopted a new form of coulter or turf cutter, that must wonderfully facilitate the operation of the implement.

The following certificate, however, where the names of the subscribers are known, will go much farther than any opinion we might express. To those to whom they are strangers we will venture to say, there are names on that list not surpassed, for practical skill, in the State of Virginia. The gentleman who heads it happened to call at our office a few days since and declared, that the individuals signing the certificate, after the fullest and most satisfactory trials, were convinced, notwithstanding preconceived prejudices, that the plough deserved all that *could* be said of it. They are all gentlemen engaged in agricultural pursuits, some of them well known for mechanical skill, and not one of them in the slightest degree interested in the article recommended.

"*Hanover County, April* 22; 1841.

"We, whose names are here subscribed, being farmers, have this day witnessed an exhibition of Mr. J. Tinkler's patent ploughs, and do not hesitate in saying that we consider them superior to any plough we have ever tried or seen used. We had the ploughs worked in different soils and situations, on flat and hilly land, clean and stumpy, and although the day was unfavorable for good ploughing, (being rainy) the

work was admirably done, and surpassed the work of other ploughs which had been used and made smooth, whilst Mr. Tinkler's were just from the shop, entirely new. We, therefore, with full confidence, can recommend them to all farmers, for easy draft to the horse, little labor to the ploughman, and superior execution of work.

W. B. Sydnor.
Thomas Acree.
Gilson Via.
Edward Sydnor.
Edward T. Melton.
Joseph Hooper.
Thomas K. Jones.
John King.
John Haw."

In addition to this certificate, Mr. Tinkler brings the following along with him:

"*Dry Valley, Union Co. Pa. Dec.* 12, 1839.

"Hon. R. H. Hammond,
"Member of Congress from Pennsylvania:

"*Dear Sir*,—I understand by Mr. Tinkler, the bearer of this, that he intends spending a portion of this winter in Washington City, with the view of selling the patent right of his newly invented double plough. I feel it to be my duty, as an experienced farmer, and friend to improvements in agricultural implements, to say, that I have broken up about sixty acres of fallow this season with one of his ploughs, and liking it so much better than any plough I have heretofore used, I have determined to use no other in future for breaking up fallows, and one not being sufficient, I have engaged another of Mr. Tinkler for the next season. My opinion, is, that the time is not far off when they will be the only plough used in this country. It is a great advantage on level land in keeping the ground even and free from large furrows which cannot be done with the common plough, and on the side hill the advantages are still more obvious. Any assistance, therefore, you may render Mr. Tinkler in bringing his plough to the notice of the public, will not only be rendering a benefit to the agricultural community, but will be thankfully received by your friend and one of your constituents. Isaac Eyer."

"I am well acquainted with the above named Isaac Eyer, and know him to be one of the best and most extensive farmers in Union county, and that full credit may be given to his statements. I would also say from what I personally know of Mr. Tinkler's plough, that he has not said too much in its favor. R. H. Hammond,
House of Representatives.
Washington, Jan. 10, 1840."

The patentee claims that, even upon level lands, many advantages are gained by this plough, among which he considers the relief from unsightly and useless double furrows, which must be left by other ploughs. He seems fully impressed with its superiority and challenges a comparison with any other plough in use.

Prices.—One horse plough,	$12 00
Two horse do.	16 00
Large size do.	18 00

It must be remembered that the purchaser is obtaining two ploughs in one.

Any orders or communications, post paid, will be attended to by the Editor of this paper.

For the Southern Planter.

Mr. Editor,—I accept your polite invitation, so repeatedly urged, to occupy a small portion of your columns upon the subject of our peculiar department—household recipes. In the name of the sex I thank you, sir, for your attention to those little matters, which come within our particular province, but which, small as they are, form a large item in the sum total of the comfort and happiness of a family. As a woman and a mother I thank you also for that portion of your paper, which, under the head of "Miscellany," is devoted to our instruction and amusement. In return for the gratification you have afforded us, I will, from time to time, send you some old family recipes, which may be of use to your readers. In the mean time, I beg to call your attention to the following. It went the round of the newspapers a year or two ago, from one of which I obtained it. That with such dissemination it is not in general use I can only attribute to the general indisposition to encounter the trouble of a new process, and the distaste of servants to novelties. I have been using it for three years, and am sure that it saves two-thirds of the labor of washing clothes, whereby, in small families, the cook may be enabled to do the washing, and thus the necessity for another servant may be saved. The objection that I have heard made, that the recipe has a tendency to destroy the clothes, must have arisen from the mixture of the materials in improper proportions, for my experience leads me to the conclusion, that not only are the clothes better cleansed, but that they are saved all the wear and tear incident to the old method of *rubbing*. Let any practical person give this mode a fair trial, and I am very sure they will never have clothes washed afterwards in any other manner. I give it to you not as something new, but as an old thing too much neglected.

Your friend and well wisher,
A Housewife.

RECIPE FOR WASHING.

To five gallons of soft water add half a gallon of lime water, a pint and a half of soft soap, or a pound of hard soap, and two ounces of subcarbonate of soda.

Soak the clothes over night if very dirty; at

any rate wet them thoroughly before putting them into the mixture.

When the mixture is at boiling heat, put in the clothes that have been soaked or wet, merely rubbing such parts as have been unusually soiled with a little soap. Boil them *one hour*. They are then to be taken out and drained, and thoroughly rinsed in warm water, then in indigo water, as usual, and they are fit for drying.

The preparation is intended only for uncolored articles. Lime water is prepared by pouring about four gallons of water on a pint of lime, and the subcarbonate of soda may be obtained from any apothecary's shop for about twelve and a half cents per pound.

We kiss our hand to our fair correspondent, thank her for her kind wishes, which we most cordially reciprocate, and hope to hear from her again.

POTATO BLOSSOMS.

M. Zelle, director of the Agricultural Society of Daunstadt, in 1839 planted two plats of ground of the same size, with potatoes. When the plants had flowered, the blossoms were removed from those in one field while those in the other were left untouched to perfect their seed. The former produced 476 pounds, the latter 37 pounds.

This difference has been very plausibly ascribed to the loss of nutriment required to perfect the seed, which, by the separation of the blossom, was added to the root.

PORTABLE SAW MILL.

We have heretofore entertained and expressed doubts as to the practicability of a good portable saw mill. Those doubts have been very much shaken, if not entirely removed, by the following certificate and some additional information lately received, respecting a mill gotten up by Mr. Geo. Page, of Baltimore. The certificate speaks for itself. Mr. Elisha Melton, of Louisa, called upon us yesterday, and stated, that the mill alluded to had been erected for him, and that with four horses he had been cutting 1,500 feet of inch boards per day, with ease. He spoke of it as having given him the most entire satisfaction. Mr. Bratt, of the well known house of Watchman & Bratt in Baltimore, concurred with Mr. Melton in thinking, that Mr. Page's mill, with the same power, would do infinitely more work than any other mill he had ever seen. Mr. Bratt formed the highest opinion of it after having seen it constantly in operation in Baltimore for several months. Its portability, which is such, that Mr. Melton declares he can move the whole of it with six hands, is obtained by Mr. Page's success in, what has been so often attempted, the application of a circular saw to slitting logs.

So much importance do we attach to this subject, that we have determined to avail ourselves of Mr. Melton's polite invitation to visit his establishment, in Louisa, that we may judge for ourselves of an improvement, which, if it is what it is represented to be on the highest authority, is not less interesting to the agriculturist than the mechanic.

Mr. Page has shown us the horse power which he uses with his mill, of which we have formed a most excellent opinion. We would recommend it strongly to farmers who need a horse power for any purpose. We shall have frequent communication with Mr. Page, and will obtain any additional information that our subscribers may require, with respect either to the saw mill or horse power.

The following is the certificate alluded to:

"We, the undersigned subscribers, have this day examined the Portable Saw Mill, drawn by four horses, lately put into operation by Mr. Geo. Page, of Baltimore, at the Victoria Furnace in Louisa county. It was sawing rough pine logs, and it cut three hundred feet per hour—the plank was exceedingly nice, smooth, and straight. The oak timber it had cut before we examined it was equally nice.

HUGH GOODWIN, Jr.
G. B. TAYLOR.
CHAS. B. COSBY.
PATTISON BOXLEY."

BEST CEMENT FOR JOINING CHINA.

Heat a piece of chalk to a full red heat in a fire; and while this is heating, take the white of an egg, and mix and beat together with it, one-fourth of its weight of powdered or scraped cheese, (such as is most void of cream, or oily matter, is preferable) or the curd that is formed by adding vinegar to skimmed milk; take the chalk from the fire, and before it is cold, reduce it to powder, and add as much of it to the mixture as will form a thick paste, and beat them anew all together, and use the composition immediately. When this is dry, it will resist, in a great measure, either heat or moisture. A semi-transparent cement suitable for china ware, may be made by gently boiling the flour of rice with water.—*New York Mechanic.*

From the Cultivator.

BONE MANURE.

In the Farmers' Register is a record of a series of experiments made by T. A. C. Jones to test the value of bone manure in comparison with stable manures, and he arrives at the following conclusions: "1. That when applied at the rate of from fifty to eighty bushels per acre on the exhausted lands of Virginia, one bushel of crushed bones is more than equal to one cart load of (twenty-five bushels) good farm yard

manure in its effect on the crop. 2. That the effect of bone manure is more durable than that of any putrescent manure usually procured on a farm. 3. That when applied to land which is in good heart, the effect is much more powerful than it is on very poor land. 4. That when combined with manure and applied in the form of compost [eight per cent of bone dust with the scrapings of the farm yards] the effect both instant and remote, far exceeds that of any other application with which I am acquainted; and lastly, if stable manure has to be purchased, or even hauled more than half a mile from your own stables, bone manure at fifty cents per bushel, the price it cost me, delivered on my farm, is the cheapest manure of the two."

From the same paper we learn that a citizen of New York has sold twenty tons of bones, at eight dollars a ton, to an English gentleman, who purchased for exportation.

Here is another most valuable article in daily waste, that our wiser neighbors can afford to purchase and transport across the ocean. If every farmer would prepare a receptacle for the bones left from the daily consumption of his family, a valuable pile might be accumulated with no expense, for, it is surely as cheap to throw a bone in such a place as to throw it away. Even pounded with a common hammer, they are found to be highly beneficial to the land. In this city thousands might be procured at the expense of removing them.

LARGE CALF.

A few days since a calf was dropped on the farm of Dr. John R. Woods, near this place, measuring two feet nine inches in height, five feet in length, and weighing ninety-four and three-fourth pounds; it was of the short horn Durham stock, but from a cow of ordinary size.

Charlottesville Advocate, March 20.

The experienced Editor of the Boston Cultivator recommends the following mode of procuring early potatoes:

"The best mode we ever tried to procure early potatoes, was to spread out those designed for seed on a grass plat in the garden, so thin that one should not lie upon another—cover them with horse stable manure three inches thick—then lay boards or slabs over this to keep it moist and to prevent the hens uncovering the potatoes. When the sprouts have started an inch or two the potatoes should be carefulley taken up and planted out in hills. They will ripen two weeks sooner than when the seed is taken directly from the cellar."

SUCKERS IN CORN.

An anonymous writer in the American Farmer asserts, that from careful experiments he is satisfied, that suckers do not lessen the quantity of grain, whilst they greatly increase the amount of fodder.

SHEEP.

A Mr. TWYMAN, who is said to be a very successful English farmer, has written a letter to a friend in this city, in which he states,

"I have a complete new family of sheep of my own fancy, *perfectly different* from any other in England—as far as I am able to effect it, and that in my own opinion, is nearly to perfection. They combine all the good points of the Leicester and the Down—the wool being a mixture between the two, long as the former, but much finer and closer, like the latter, with dark faces and fine countenances. One hundred teggs which were shorn on the 16th March last, then *thirteen and a half months* old, produced on an average *nine pounds* of wool each; and the two year old ram *fifteen and a quarter pounds*—clean and well washed—all of which may be seen. Nine years impartial trial of this breed emboldens me to declare myself *open to the world*, to match it against any other breed, taking as the criterion of merit, the combination of those rare but grand desiderata, weight and value of fleece, symmetry of carcase, quality of mutton, with aptitude to fatten and arrive at early maturity.

"The one hundred teggs above named were immediately after being shorn, sold at three guineas each, out of their wool, for which two shillings per pound has been refused—calculating the wool at this price, the one hundred teggs, only thirteen and a half months old, have produced four huudred guineas, or four guineas ($20) per head! I seek in vain for a parallel in the present, or a record of a similar price in any past age."

Below is the challenge referred to in the above. It was communicated through the Right Hon. Earl Spencer, a leading member of the English Agricultural Society. It was not taken up at the end of six months and the challenger now "stalks the champion."

"PROPOSAL.

"That I will produce on July 18, 1840, twenty-five wether lambs, drawn from a flock not exceeding three hundred, to be wintered against a like number of any other breed on arable land, and not under cover, to be fed together until the commencement of turnip feeding, from which time each lot is to be kept separate, and to be served with the following portions of food: Two pounds of good hay and three gallons of cut swedes per head per day, until the 1st of November, after which one pint of beans to be given in addition until the 15th of April following, when the twenty best from each lot shall be drawn, sheared and slaughtered, the stakes to be given to the owner of such lot as shall be found to return the greatest value in wool and mutton. The lambs to have been yeaned after Old Christmas, 1839, to have lived on roots, hay and green food only, and their dams to have been

regularly folded, on arable land, after the 25th of March, until the lambs are weaned.

"It is an indispensable condition, that the trial be conducted upon arable land, the object being to obtain hardihood of constitution, with early maturity, valuable wool, and young mutton of the best quality, while consuming the food on the land which produces it. Stakes £25.

"The offer to remain open until the 25th of March, 1840."—*English Farmers' Magazine.*

Should any of our agricultural friends be desirous to make an experiment of this breed, we could, no doubt, procure some of them direct from the breeder, through his correspondent, Mr. W. L. C. of this city.

For the Southern Planter.

Richmond, May 5, 1841.

A Naturalist begs the Editor of the Southern Planter to notice a mistake in the note appended to his second communication where the word *plants* is used instead of the word *fruits*, so that the note should read, "It has been observed that *fruits* protected from the motions of the wind by walls or espaliers grow to a larger size than under other circumstances." This correction is the more necessary, as the motions of the wind, to a certain extent, are favorable to the growth and health of *plants*.

Of all animals, of whatever kind, those with the smallest and cleanest bones, are generally the best proportioned, and covered with the best and finest grained meat; they are the hardiest, the healthiest, and best feeders; able to bear the most fatigue while living, and worth the most per pound when dead.—*Culley.*

INTERESTING TO BLACKSMITHS.

A blacksmith, of Milan, has discovered that, by suspending a length of chain to one of the corners of the anvil by means of a ring, the noise of the hammer may be almost entirely deadened.—*Farmers' Monthly Visitor.*

MANURING.

Much contrariety of opinion has existed upon the best manner of applying manure, and the public have been very much divided between the broadcast and hill systems. The Editor of the Boston Cultivator, whose long experience entitles his opinion to much weight, greatly prefers the former. He urges that the application in the hill produces much stalk in proportion to the corn, and pleases the eye at the expense of the pocket. He concludes by saying,

"Thus in almost all cases—and we have watched a thousand fields—we get a better harvest by spreading on than by putting in the hill. A trifle in the hill does no injury, but a shovel full is often a harbor for worms that get hold before the roots are large enough to protect themselves.

"When all are agreed that for future crops the land is far better prepared in our mode than in the other, should we have no regard to the permanent improvement of the soil? In many towns near Boston, we plant our lands with a view, principally, to preparing them for grass—a far more profitable crop—we never want our manure to be left in hills or heaps. We want it to be incorporated with the soil."

IMPROVED STOCK.

Mr. Chilton Allen, in a very able address delivered in Kentucky, complains much of the want of legislative attention to agriculture. To show how much national wealth is increased by the efforts which are now making for the improvement of agriculture, he states,

"There are 490,613 cattle taxed in the State of Kentucky; their average value is but $5 97, while the average value of those in three counties, that have improved their stock, is $15."

SOAP SUDS.

We find a writer in the Southern Agriculturist confirming a statement we published some time since as to the value of this article, both as a manure and a preventive against the ravages of worms, bugs, &c. Why is it so generally thrown away, when it may be so well applied?

A correspondent from Amelia says, "Get Mr. Wm. Old, of Powhatan, to give us his views and experience. He is a first rate farmer, and knows how to communicate his information." We most heartily second the invitation of our correspondent to Mr. Old.

The same gentleman says, "I will obtain if practicable a detailed account from one of my neighbors, (who although a young man, has not perhaps his equal in this section,) of his successful management of the tobacco crop. His crop has averaged from twelve to sixteen dollars round, for six or eight years."

Success is the best evidence of skill, and we hope that our correspondent may be successful in his attempt to draw out the gentleman alluded to. We would suggest the propriety of a review of the article upon this subject now in a course of publication in our columns. The arrangement seems good, and it would be very desirable to have the views there taken either confirmed or refuted.

TO CORRESPONDENTS.

The article from W. F. although not without merit, is too abstruse, lengthy, and theoretical for our columns. If he will grant us the liberty of curtailing and condensing we should be pleased to make use of his communication.

The statement of "Curtius" would be extremely interesting if given over a real signature: but we shall make it an invariable rule never to publish the result of an experiment for which we cannot furnish the name of the reporter. Nothing is more valuable than the results of experiments, but misstatements may be as injurious as correct reports are beneficial, and where so much depends upon veracity, we must at least insist upon the ability to refer to the reporter, even if we are not allowed to publish his name. We hope our friends will acquiesce in the propriety of this rule.

The communication from G. N., Esq., was received too late for insertion in this number, but will certainly appear in our next.

Mr. A. B. of Tappahannock, is respectfully informed, that the difficulty of the subject caused his inquiries upon the best mode of using lime, to be laid over for farther investigation. In the meantime, we invite communications upon the subject; especially, the result of experiments.

AGRICULTURAL SHOW AND FAIR.

This laudable enterprise is progressing with remarkable spirit and activity. We are glad to find that our citizens generally, alive to their true interests, are embarking in it with great zeal. It promises soon to be a most brilliant affair. The coming meeting will be well worthy the attention of farmers, even from distant parts of the State. We had no idea of the undeveloped resources for such an institution, even in our own neighborhood, until the spirit of competition brought them to our notice.

The address of the President, whom we consider one of the soundest and most practical farmers of the day, will alone be sufficient compensation for the trouble of a visit to our city on the 26th of May.

The site for the exhibition, the beautiful tavern lot at Bacon Quarter Branch, has been most happily selected. Every provision and arrangement will be made for the accommodation of competitors and visiters.

Parties of ladies and gentlemen have already been formed to visit the exhibition, which must prove of the most interesting character to young and old.

MISCELLANY.

CHEERFULNESS.

Old John Selden, of whom it has been said, that "he had made it an honor to be an Englishman," has declared, that "a contented mind under adverse circumstances was the purest homage to the Deity." Cheerfulness has been esteemed a *virtue*, and the Christian and the sage must, alike, eschew that moroseness of disposition, which too often inclines us to repine at the decrees of fate.

How much of happiness in this life depends upon a cheerful disposition. It is not only pleasant in itself but the cause of pleasure in others. Affect the virtue if you have it not; it will sustain and impart new energy to those around you, and will sweeten the bitterest cup in the draught of life. Gloom and discontent make an unhappy home and only serve to feed the evil that they war against.

But to sustain the spirits and raise the drooping hopes of man has been assigned as the peculiar province of the gentler sex. Poets, from Spenser to Washington Irving, have delighted to paint woman as a ministering angel gaining strength and fortitude from what crushes and humbles her rougher companion. But not to the imagination of poets has been confined this holy attribute. Amongst the hundred exhibitions of it which the French revolution, that day of trial, brought forth, the following is related with all the simplicity of truth and the delicacy of poetry. It is only one of the many examples, which we have all witnessed, of the possession of that amiable and noble quality which makes a Frenchman courted and loved wherever he is known. We must love the heart which is free and ready to sympathize in our joys, forgetful of its own sorrows, and we cannot but respect the mind which is superior to fate itself. The story is abridged from the American Farmer.

MISFORTUNE AND EXILE ENNOBLED.

By Madame Junot, Duchess D'Abrantes.

In 1793, M. de Talleyrand was in Boston. One day, whilst crossing the market-place, he was compelled to stop, by a long row of wagons all loaded with vegetables. The wily courtier, generally so dead to emotion, could but look with a kind of pleasure at these wagoners, who, by the by, were young and pretty country women. Suddenly the vehicle came to a stand, and the eyes of Talleyrand chanced to rest upon one of the young women who appeared more lovely than the others. An exclamation escaped from his lips; it attracted the attention of the lovely one, whose country dress and large hat bespoke daily visits to the market, and, as she beheld the astonished Talleyrand, whom she recognised immediately, burst out laughing. "What! is it you?" exclaimed she. "Yes, indeed, it is I. But you, what are you doing here?" "I," said the young woman, "I am waiting for my turn to pass on. I am going to sell my greens and vegetables at the market." At this moment the wagons began to move along; she of the straw hat applied the whip to her horse, told M. de Talleyrand the name of the village where she was living, requested him earnestly to come and see her, and disappeared, leaving him as rivetted on the spot by this strange apparition. Who was this young market woman? Madame la Comtesse de la Tour-du-Pin, (Mademoiselle de Dillou,*) the most elegant among the ladies of the Court of Louis the Sixteenth, king of France, and whose moral and intellectual worth had shone with so dazzling a lustre in the society of her numerous friends and admirers.

At the time when the French nobility emigrated, she was lively, endowed with the most remarkable talents, and like all the ladies who held a rank at the Court, had only had time to attend to such duties as belonged to her high, fashionable, and country life. Let any one fancy the sufferings and agony of the woman, born in the lap of wealth, and who had breathed nothing but perfume under the gilded ceiling of the Royal Palace of Versailles, when, all at once, she found herself surrounded with blood and

* She returned to France under the Consulate; her husband was Prefect of a Department.

massacres, and saw every danger besetting her young and beloved husband and her infant child. They succeeded in flying from France. It was their good fortune to escape from the bloody land where Robespierre and his associates were busy at the work of death. Alas! in those times of terror the poor children themselves abandoned with joy the paternal roof, for no hiding place was secure against the vigilant eye of those monsters who thirsted for innocent blood. The fugitives landed in America, and first went to Boston, where they found a retreat.

They boarded at Mrs. Muller's, a good-natured, notable woman, who on every occasion evinced the greatest respect and admiration for her fair boarder; yet M. de la Tour-du-Pin was in constant dread lest the conversation of that good, plain, and well-meaning woman might be the cause of great ennui to his lady. What a contrast with the society of such gentlemen as M. de Talleyrand and the high minded and polished nobility of France! Whenever he was thinking of his sad transition, (particularly when absent from his wife, and tilling the garden of the cottage which they were going to inhabit,) he felt such pangs and heart throbbings as to make him apprehensive, on his return to Mrs. Muller's, to meet the looks of his beloved wife, whom he expected to see bathed in tears. Meanwhile, his good hostess would give him a hearty shake of the hand, and repeat to him, "Happy husband! happy husband!"

At last came the day when the fugitive family left the boarding-house of Mrs. Muller to go and inhabit their little cottage, where they were to be at least exempted from want, with an only servant, a negro, a kind of Jack-at-all-trades, viz. gardener, footman, and cook. The last function M. de la Tour-du-Pin dreaded most of all to see him undertake. It was almost dinner time. The poor emigrant went into his garden to gather some fruits, and tarried as long as possible. On his return home his wife was absent; looking for her, he entered the kitchen and saw a young country woman, who, with her back to the door, was kneading the dough; her arms, of snowy whiteness, were bare to the elbows. M. de la Tour-du-Pin started; the young woman turned round. It was his beloved wife, who had exchanged her muslins and silk for a country dress, not as for a fancy ball, but to play the part of a real farmer's wife.

At the sight of her husband her cheeks crimsoned and she joined her hands in a supplicating manner. "Oh! my love," said she, "do not laugh at me, I am as expert as Mrs. Muller." Too full of emotion to speak, he clasped her to his bosom and kissed her fervently. From his inquiries he learned that, when he had thought her given up to despair, she had employed her time more usefully for their future happiness. She had taken lessons from Mrs. Muller and her servants; and, after six months, had become skilful in the culinary art, a thorough housekeeper, discovering her angelic nature and admirable fortitude.

"Dearest," said she, "if you knew how easy it is. We, in a moment, understand what would cost a country woman one or two years. Now we shall be happy; you will no longer be afraid of ennui for me, nor I of your doubt about my abilities, of which I will give you many proofs," said she, looking at him with a bewitching smile. "Come, come, you promised us a salad, and I am going to bake to-morrow. To-day the bread of the town will do; but oh! henceforth leave it to me." From that moment Madame de la Tour-du-Pin kept her word; moreover, she insisted on going herself to Boston to sell her vegetables and cream cheese. It was on such an errand to town that M. de Talleyrand met her. The day after, he went to pay her a visit, and met her in the poultry-yard, surrounded by a host of fowls, hungry chickens and hens. Truly might have been said to her,

> From thee unfledged birds receive their food,
> And all that live know well that thou art good.

She was all that she promised to be. Besides, her health was so much improved that she seemed less fatigued with the house work than if she had attended the balls of a winter. Her beauty, which had been remarkable in the gorgeous palace of Versailles, was dazzling in her cottage in the new world. M. de Talleyrand told her so. "Indeed!" replied she, with naivette; "Indeed do you think so! I am delighted to hear it. A woman is always and every where proud of her personal attractions." At that moment the black servant bolted into the drawing-room holding his jacket in his hand with a long rent in the back. "Missus, him jacket tore; please mend him." She immediately took a needle and repaired Gullah's jacket, and continued the conversation with charming simplicity.

This little adventure left a deep impression on the mind of M. de Talleyrand, who used to relate it with that tone of voice peculiar to his narrations.

THE ORIGIN OF COCK-FIGHTING.

As Themistocles was leading the forces of Athens against the Persians, he met some cocks fighting; on which he commanded his army to halt, and thus addressed them: "Fellow-soldiers, observe these animals; they do not assail each other for the sake of country, nor for their paternal goods, nor for the sepulchres of their heroic ancestors, nor for glory, nor for liberty, nor for children; but for mastery. How then ought you to fight, who have all these things to contend for?" This homely but apt speech is said to have had a powerful effect in animating the Athenians to victory; and in order to perpetuate

the memory of the incident, a law was afterwards passed, that "there should be a public cock-match on the stage every year." And hence, says Ælian, arose the pastime of cock-fighting.

AN ACCOMPANIMENT.

The most singular spit in the world is that of the count de Castel Maria, one of the most opulent lords of Treviso. This spit turns one hundred and thirty different roasts at once, and plays twenty-four tunes, and whatever it plays, corresponds to a certain degree of cooking, which is perfectly understood by the cook. Thus, a leg of mutton *a l'Anglaise*, will be excellent at the 12th air; a fowl *a la Flamande*, will be juicy at the 18th, and so on. It would be difficult, perhaps, to carry farther the love of music and gormandizing.

MUTUAL CONVERSION.

Jeremy Taylor says—"There is a strange spring and secret principle in every man's understanding, that is oftentimes turned about by such impulses, of which no man can give an account. But we all remember a most wonderful instance of it in the disputation between the two Reynolds, John and William—the former of which being a Papist, and the latter a Protestant, met and disputed, with a purpose to confute and convert each other; and so they did; for those arguments, which were used, prevailed fully against their adversary, and yet did not prevail with themselves. The Papist turned Protestant, and the Protestant became a Papist, and so remained to their dying days."

Richmond Monthly Markets, May 5th, 1841.

TOBACCO.—The inspections are large—prices keep steady for general qualities—and superior kinds for manufacturing sell at $15 a $16.

FLOUR.—Supplies small—sales $4 62½ a $5. At latter price, the quality *extra* superfine.

WHEAT.—Scarcely any receiving—good $1 15.

CORN.—Supplies small—sales at 50 a 55 cts. per bushel.

PLASTER.—Sales at the basin landing at $5.

BAGWELL, SMITH & JONES.

Black-eyed peas—in great demand—market bare—would probably bring $1 50 per bushel by the quantity.

Beef—dull at $5 to $6 50.

Mutton $2 to $3 50.

Butter—in great demand—good firkin 20 cts.
" " roll at 22 to 25 cts.

Lard—dull at 9 cents.

Bacon—Mountain 8 cents.
Smithfield 9 cents.

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THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.*

Tillage and Pasturage are the two breasts of the State. *Sully.*

C. T. BOTTS, Editor, MAIN STREET.

Vol. I. RICHMOND, JUNE, 1841. No. 5.

TOBACCO.

[Continued from page 58.]

HOUSING, FIRING, HANGING AND PACKING.

After a crop of tobacco is *laid by*, that is, after it is ploughed and hoed enough, there are from three to five weeks before it is ripe and ready to go to the house. During this time, a planter should make all the necessary preparation for *housing*. If he intends to cure his tobacco with fire, his wood should be cut and hauled to his barns. If he has not got tobacco sticks enough to hang all his crop, they also should be prepared. If he intends curing without fire, his scaffolds should be put up around his barns. In short, every thing that will be wanted, should be in its place before he commences housing; for after he gets fully to cutting his tobacco, he will have enough to do, without having to do what might have been done before.

I will, in this place, make some remarks on curing of tobacco. *Firing*—that is, making fires in the barn, under the tobacco, after it is *hung*—is the surest way to cure fine tobacco. Tobacco that is intended to be *fired*, should be hung in the house as quick as can be after it is cut. The house should be filled in a day, if possible, and fires put in immediately. The quantity of heat from fires during the different stages of curing a house of tobacco, should be regulated by the state of the weather. When fires are first put in a house, under tobacco, just hung in, they should not be large, especially if the weather is warm and dry. For the first, second, and third day, the heat should be such as will yellow the tobacco without sweating of it. After this time, the fires should be larger, so as to keep the tobacco as it cures, dry. In dry warm weather, very little fire under tobacco will cure it best. In wet or cool weather, of course, more heat from fires is necessary. Tobacco cures of a yellow color, when managed in this way, if the fires are kept under it from seven to eight days. It is a very good way, also, in firing tobacco, to let it hang in the house until it yellows by the air, before fire is put under it: then three or four days firing will answer. But the tobacco is not likely to cure yellow—it will, if properly managed, cure what is called a fine red.

After all that may be said about firing tobacco, I would not recommend it only at particular times, unless barns could be fixed with furnaces so as to carry off the sparks and smoke, so as to prevent the barn from taking fire. I am apprehensive that even furnaces would not be perfectly safe; for there would be some danger even from having fire in the barn; and the pipes that would carry off the smoke and sparks, might, by passing through the tobacco as well as the barn, communicate fire to some part of it.

The loss of a barn with its contents is a heavy one. It takes also a great deal of wood to fire a barn of tobacco; and this on plantations where fuel is scarce, is of considerable consequence. Even if wood is plenty, it takes some labor to cut and haul it. I have for several years past cured my tobacco without putting a particle of fire near it; and I have found it to be nearly, if not quite as fine, as if it had been *fired*. Tobacco of good color, cured without fire, is worth more money in a foreign market, from the circumstance of its not being smoked by the firing process.

Tobacco that is to be cured without fire, should never be put in the house without its being hung out of doors, after it is cut, for several days. There should be erected around each barn a *scaffold*. The tobacco, as it is *cut* and *sticked*, should be hung on the scaffold, and if there should be no appearance of rain, it may remain there for five or six days before it is put in the house. Tobacco, before it begins to cure on a scaffold, is not injured by rains; and after it begins to cure, a rain that lasts a short time, does not injure it. It is rain that lasts two or three days that injures tobacco hung on a scaffold.

A scaffold is constructed by burying in the ground about two feet, forks set up perpendicularly, about ten feet apart from each other; in which poles are put nearly the distance of a common fence rail from each other. Fence rails are thus put across from one pole to another, leaving a space of four feet between each rail. These are what are called *tiers*. A scaffold should not be very high, for if it is, the lower leaves of the tobacco will become bruised from the winds. A scaffold should be of such a height, as to leave the ends of the tobacco leaves from one to two feet from the ground. It is not so well to erect scaffolds on the north or northwest part of a barn. They should always be made on the warmest sides of the barn. A planter can always get his forks for his scaffolds

in the winter season, whilst cutting wood and rail stuff. Having said this much about scaffolds, I now return to the curing and housing of tobacco.

A person unacquainted with scaffolding of tobacco, would suppose that there could not be so much put in a barn in this way, as there could be by *firing*. It would be entirely a mistake. There can be as much tobacco cured in a barn by scaffolding, as there can be by *firing*. It is true it could not be done so quickly; yet in an ordinary housing season there is ample time to do it.

A planter who has several barns, when scaffolding of tobacco, should manage so as to be able to take into the house a part of a scaffold of tobacco, every day, except rainy ones, during the season. When tobacco is being carried in the barn from the scaffold, the lower part of the barn should be hung full; and if that part of the barn will hold all that is at that time to be taken from the scaffold, it should be left there until the space is wanted for more tobacco from the scaffold. By this means, the tobacco may have the advantage of several days in the barn, before it is finally hung away. The best time of the day to take tobacco in the barn, from the scaffold, is late in the evening. It should be handled very carefully, so as not to crumble the cured leaves. Tobacco should not, whenever it can be avoided, be carried in the barn from the scaffold, while wet with dew. This can always be avoided, except when there is an appearance of rain.

When about to fill a barn with tobacco that has been scaffolded, the tobacco should be hung so as to leave *fire holes;* for if, about this time, there should come a spell of wet weather, the tobacco can have fires put under it, and be kept from being injured by the weather. However, tobacco that has been well killed by being scaffolded, will not injure in wet weather near as soon as a person might suppose. It is only in long spells of warm wet weather that *firing* is necessary for tobacco that has been scaffolded. There are only two cases in which I would recommend *firing* of tobacco—one is in the instance just mentioned; the other is when a crop of bacco, from untoward circumstances, ripens, or is not fit to be cut until late in the season for housing. Fires, by curing the tobacco quickly, prevents it from freezing in the house, which the lower leaves are apt to do, if left to cure by the air, when housed late in the season. Sometimes planters fire for want of house-room; that is, they cannot wait for their tobacco to cure by the air. I have always thought it best to have a sufficient number of barns. A planter had better build two barns than to have one burnt down.

I will here make some remarks on the construction of tobacco houses. Tight houses will not cure tobacco as well as moderately open ones. Even when tobacco is cured by fires, a very tight house is not the best. There is a large quantity of moisture in a house of uncured tobacco—so there must be some opening for it to escape. I have seen barns where the main building was shedded all around with no other covering except the roofs of the main building and sheds—that is, no weather-boarding put on any part of it, except the roofs. Barns of this construction certainly cure tobacco best when there are no long spells of wet weather; for these kind of barns cannot be fired in. It is also liable to be injured, if not stripped shortly after it is cured. I have also seen barns of this construction with sheds partially weather-boarded by setting up narrow planks around the sheds two or three inches apart. This is certainly some security against wet weather; yet the tobacco is not sufficiently secured against it.—Those who have the timber, can build no kind of barns that will answer better for tobacco than the old fashioned barns built of oak boards and shingles: they let in sufficient air when it is curing, and keep out damp air after it is cured. Barns, when built with plank and shingles, always cure tobacco best when the plank is put on with one end upwards, though the frames of barns weather-boarded in this way, will not last as long as when the plank is put on horizontally. The best way probably to build a barn to suit all times, and all kinds of weather, would be to have all the plank intended for weather-boarding, made into large doors, and well hung with good hinges, so that when the tobacco wanted air, all the doors could be opened—when damp air would injure it, the doors could be shut. A barn constructed after this manner, would cost a little more money for hinges for the doors, and latches for fastening of them. I have seen one built after this manner, which answered very well until it was burnt down. The doors could reach only to the eaves of the house, if so far; of course the other parts of the building must be weather-boarded in the usual manner.

When tobacco is ripe and fit to be cut, there are around the roots of the plants several leaves nearly cured. They can now be saved either before or after it is cut. Tobacco should have no leaves taken from its roots until it is ripe; taking away the leaves too early, stops the growth. The tobacco saved from around the roots of the plant, is called *ground leaf.* The usual way of saving this kind of tobacco, is to pull the leaves by hand from the roots of the plants, and tie* them up in small bundles, and straddle them across a stick, until they are cured enough. When fine ground leaf is cured, the usual way is to select the largest leaves that are about half cured, and run a peg three or four inches long through the large end of the stem, filling the peg with leaves, but leaving a space

* Sweet potato vines make a good tie.

of about half an inch between them, and then hang them across tobacco sticks.

The best time of the day to gather ground leaves, before the tobacco is cut, is late in the day, about an hour from sunset; when the tobacco ground is wet, the leaves are at this time of the day in *order* to be gathered. Leaves gathered when the dew is on them, will injure before they get dry. Tobacco, when being cut, should not, if it can be prevented, be suffered to *fall* too much—that is, lie on the ground until the leaves become very limber; for when they become too much so, they clam around the stalk, and the tobacco will not cure so good by it. A great deal of care is necessary while tobacco is being cut and carried to the house; it must not be suffered to lie in heaps and heat. While laying in the field, if the sun shines hot at the time, it will be burnt by the sun, if permitted to lay too long. When hauling it to the house, the loads should not be large, as it will bruise when hauled in large loads. I have seen some persons have bushes with green leaves laid in the bottom of their carts before the tobacco was put in the cart. This was done to prevent the tobacco from being bruised.

There are three ways in use for hanging of the tobacco plants on the stick; one way is, by splitting the stalk before the plants are cut; another way is to put a peg in the big end of the stalk; this is a tedious way, and though in old times the only way used, has now nearly gone out of use. The other way is to put a sharp pointed iron spear, with a socket like a chisel on a tobacco stick, and then run the plants on the stick, by running the iron spear through the stalk of the plants. This is the quickest way of the three, but unless there is a considerable space left between the plants, the tobacco will injure. The most careful hands should only be permitted to stick tobacco in this way. Those hands who could not be trusted to put tobacco on the sticks, could be engaged in the tobacco field at other work.

The splitting of the stalk and afterwards straddling it across a stick, though not so quick a way as the one just mentioned, is a better way for several reasons, one is, the plants can be easily regulated when they are put in the house; another is, the tobacco cures quicker, and when housed late is not so apt to be frozen in the house. It does not require so much judgment when putting the plants on the stick. The tobacco also, is much easier to get off the stick when it is wanted to strip.

We will now suppose the tobacco to be housed and cured and ready to be stripped, that is, taking the leaves from the stalks; whenever the tobacco is moist enough, or in planter's language, in *order*, this can be done. The different kinds and colors must be tied up in separate bundles, and each kind put away by itself. After tobacco is stripped care must be taken to prevent it from heating in the bulks, which it quickly does in warm weather if put away in too moist a state. If it should begin to get warm it should be taken out of bulk immediately and put in a situation to cool and dry. If bulks of tobacco should heat in warm, wet weather, and the weather continues so, the best way then is to straddle the bundles across sticks and hang them up in the house. Tobacco of a fine color and good leaf should never be suffered to heat in bulk; for the color as well as the leaf, is considerably injured thereby. Tobacco of a dull color and coarse leaf is not injured so much by heating in bulk; though heating in bulk injures any tobacco more or less; the old notion that tobacco was not conditioned to pack in hogsheads, until it had heated in bulk is entirely erroneous. Tobacco may be packed without injuring in the hogshead, if properly dried after being stripped from the stalks; indeed tobacco after it is stripped requires a great deal of attention to manage it properly; and if managed properly until it is in the house and cured, may be by improper management or neglect, made to be worth less money, after this time. I have seen tobacco myself put up in bulks, and suffered almost to rot before any thing was done to it. It is principally the management and handling of tobacco after it is cured, that makes the distinction between a nice planter and an indifferent one.

When bulking of tobacco the leaves should be kept straight and the bundles spread open somewhat like a fan, which can easily be done, by placing two or three bundles at a time, by the person who is handing the tobacco to the bulker, against his breast and giving them a stroke down with the other. I have found the best way to condition tobacco when stripped, to be as follows:—Take two tobacco sticks and lay them parallel and about one foot apart, then bulk on them about one hundred pounds, by placing the bundles across the sticks. The tobacco should be knee'd down; two persons can move these bulks whenever wanted by taking hold of the ends of the sticks. Tobacco when bulked in this way, if not very moist, will not want any thing more done to it until wanted to pack, especially if the bulks are put up on the *tiers* of the barn, which can be easily done by lifting them up by the tobacco sticks. After tobacco has been bulked in the way here recommended the small bulks should be on a drying day taken and opened, and the tobacco laid down by hand on the large bulking places. Bulking places should be fixed for the different qualities, and as the small bulks are pulled to pieces the different qualities should be placed apart from each other. Though in bulking on sticks as recommended, each quality as near as can be at that time ascertained, should be bulked to itself. In moving tobacco from the smaller to the larger bulks,

the large bulks should, if the tobacco is very moist, have only three or four courses of bundles of tobacco placed on them at one time; after they have dried somewhat, three or four more courses can be placed in the same manner, and the operation repeated as long as necessary. Thus a barn of tobacco may be conditioned in this way without any of the tobacco heating.

The best directions that can be given about packing of tobacco in hogsheads, are that the tobacco should only be moist enough to keep it from crumbling, and that fine tobacco should not be pressed so hard as to bruise it. Tobacco though often packed before, is hardly conditioned enough before the month of May.

For the Southern Planter.

THE INFLUENCE OF CULTIVATION ON VEGETABLES.

NO. IV.

A flower is the assemblage of those organs, upon which are produced the germs of phenogamous plants, (such plants as are visibly furnished with sexual organs,) and of those which immediately surround them. These organs are divided into four classes, in accordance with their position, appearance, and physiological role, viz. the calyx, corolla, stamens, and pistil.

These organs are leaves in a particular state of transformation, and are ordinarily arranged in regular whorls; and although they have very different offices to perform, yet examination proves that at a very early period, when they are first formed, they are absolutely the same as leaves of the same age; that it is only after they have been growing sometime that they begin to assume the character under which they finally appear; and that consequently they are very often found resuming the appearance of common leaves if any thing occurs to interfere with their intended structure before it is entirely fixed.—Thus we find leaves in the place of petals, or petals metamorphosed into leaves, in some kind of double tulips; sepals and petals often changed to leaves in double roses; all the parts of the flower turned into leaves in other plants, and even after the formation of the fruit, we find sometimes a part of the flower in the shape of leaves protruding from the extremity of the fruit as in the *pear* at the garden of Versailles, noticed and described by M. Poiteau.

We will describe these organs in the order in which we have mentioned them above, and of the calyx, which is the exterior envelope of a flower, and consists of two or more divisions called *sepals*, which, however, frequently unite into one piece; the *corolla* is found next within the calyx, and consists of two or more pieces called *petals*, which also occasionally unite into one piece. Petals are usually of some bright color differing from that of the sepals; the stamens constitute the whorl of organs immediately within the petals, and each stamen consists of a filament, and anther; the filament being a column to support the anther, which is situated at its superior extremity, and affords a matter called pollen, by means of which, the fecundation of plants takes place; the pistil occupies the centre of the flower, and is composed of three parts, viz. the ovary, the style, and the stigma. The ovary is a hollow case enclosing seed or little bodies destined to become seed. The stigma is situated at the superior extremity of the *style*, whose office (the style's) is to connect together the ovary and stigma. The function of the pistil is to receive the pollen upon its stigma and to convey it to the ovary in order to fecundate the seed.

These various parts are not always present in all flowers; for there are some where the calyx is reduced to a mere rim—others where there is no corolla—others without stamens, and others without pistils; besides, these organs are liable to degeneration, abortion, multiplication, and transformation.

From the multiplication of parts, such as the formation of a new whorl of petals, or the separation of a petal, which is composed usually of two soldered together and the transformation of stamens and sepals into petals, result *double flowers*. As these changes are liable to occur when the plant is forced into an extraordinary development from being placed under circumstances peculiarly favorable to their growth, *double* flowers are a striking evidence of the influence of cultivation, as is abundantly exemplified in the dahlia and stocks, &c. which in their natural state are single, but which have their claims to admiration much increased by the addition to their gaily colored parts, from cultivation, but at the expense of being called "monsters" by botanists, in consequence of their abnormal condition.

Before I take my leave of you, Mr. Editor, I must beg another correction which is rendered necessary, I have no doubt by my unfortunate hand writing. In the third number of "The Influence of Cultivation on Vegetables," the second sentence of the second column of the 59th page now reads, "Thus a great part of our fruit trees, yielding the most delightful fruit, are the offspring of seed trees, producing indifferent fruit," &c. Now I intended this sentence to read, "Thus a great part of our fruit trees, yielding the most delightful fruit, *have, as the offspring of their seed trees*, producing indifferent fruit."

Be assured, Mr. Editor, that no one appreciates more highly your courtesy, or feels more anxious for the success of your paper, than

A NATURALIST.

SUGAR BEET.

Although some misbelievers have denied the value of this fashionable article as food for cat-

tle, especially for milch cows, the weight of testimony preponderates greatly in its favor, and we may safely pronounce it *at this time* queen of roots.

DEEP PLANTING.

A patron of ours informed us a few days since, that while taking his fodder, he discovered a great difference in the appearance between two pieces of corn, which were planted at the same time, and in the same kind of soil. The fodder in one piece of ground dried up so fast that he could scarcely get through with stripping it before it was entirely burnt up, to use the common phrase. On going to the other piece, he found it green to the ground, and in good plight for stripping. He was struck with the difference in the two lots of corn, and on reflection, recollected that on getting ready to plant his corn in the spring, he ran a furrow with a large shovel or barshare plough, after which he followed with a small plough, called a bull tongue, running it pretty deep in the same furrow, till he got half over the piece, where he concluded to plant the balance in the single furrow, and discontinued the use of the bull tongue. The result was that the part planted deep, in the opening made by the small plough, where the large one had previously been run, produced a third more fodder, of a better quality than that planted in the shallow one, made by the large plough alone: besides the great differences there must be in the weight of the corn drying up too fast of course to make a proper article for bread. This should be remembered by farmers, and the evil of shallow planting avoided, especially since all seem to think the seasons are becoming shorter, and much drier than formerly.—*South. Cultivator.*

Middlesex County, April 20, 1841.

To the Editor of the Southern Planter.

Dear Sir,—Having seen the rule of William Murray, Esq. of South Carolina, for measuring a corn house, which was published in the Southern Agriculturist, and copied into your paper, with all due deference, I will submit to your readers some remarks on the same subject. I do not know the principles upon which Mr. Murray based his calculations, except that two barrels of corn in the ear will shell out precisely one barrel. It seems to me, however, his rule upon any principle falls a little short of the true quantity of shelled corn, allowing it to shell out only one-half. The size of the bulk of corn, given by him, is 12 feet long, 11 feet broad, and 6 feet deep, consequently it contains 792 cubic feet, or 1,368,576 cubic inches. Divide these cubic inches of his bulk of corn by 2,150, which are the cubic inches of a bushel, and you will have $636\frac{1}{2}$ bushels of corn in the ear, and $318\frac{1}{4}$ bushels of shelled corn. The difference between us is small, it is true, his being $633\frac{6}{10}$ bushels in the ear, and $316\frac{8}{10}$ of shelled corn. It ought to be borne in mind that both his and my calculations, so far, are based upon the supposition, that corn in the ear will shell out just half its quantity, which, I think, is incorrect. In this, it seems to me, consists the principal defect of his rule. If the experiment be made carefully, it will be discovered, that corn in the ear will shell out a little more than half. For this surplus, Mr. Murray's rule has no provision.

The following, as a general rule, is submitted to the consideration of your readers, to ascertain how much a corn house, cart body, or bulk of corn of any size, will shell out. 21,500 cubic inches will contain ten bushels of shelled corn, but the same space, filled with corn in the ear, will shell out a little more than five bushels. These 21,500 cubic inches contain 12 cubic feet and 764 cubic inches. Two barrels, or ten bushels in the ear, will, generally in shelling, overrun just about these 764 cubic inches.—Therefore, after levelling the corn in the house, multiply the length and breadth together and this product by the depth, which will give the cubic feet of the bulk of corn; then divide this last product by 12, and the quotient will be the number of barrels of shelled corn the house, cart, or bulk contains. If there be a remainder after the division, it will be so many twelfths of a barrel of shelled corn.

EXAMPLE.

12 feet long.
11 feet broad.

132
6 feet deep.

Divisor 12) 792 cubic feet.

---

66 barrels of shelled corn.
5

---

330 bushels of shelled corn.

Between Mr. Murray's calculation and this, it will be seen, there are $13\frac{2}{10}$ bushels difference of shelled corn. This difference, however, arises principally from the fact, that he made no allowance for the overrunning of the corn in the ear. According to my calculation, 53 bushels in the ear, will shell out about $27\frac{1}{2}$ bushels instead of $26\frac{1}{2}$. This rule, I think, is sufficiently accurate to enable a farmer to estimate the amount of his crop after it is housed, without the trouble of measuring it.

Respectfully, yours,

GEORGE NORTHAM.

We have received one or two other communications to the same effect as the above, which the publication of this renders it unnecessary to notice, except that we may return our thanks to our correspondents for their favors.

The following is from a correspondent to whom the readers of the Planter are already much indebted:

DIRECTIONS FOR MAKING BUTTER,

Principally extracted from a work published by the Society for the Diffusion of Useful Knowledge, in England.

TO MAKE BUTTER FROM CREAM.

When the milk is first drawn it should be carried as gently as possible to the dairy—strained through sieves—deposited in shallow pans or coolers not exceeding three or four inches in depth. The best cream rises within twelve hours, but it is more generally left for twenty-four or thirty-six hours, according to the season. A small quantity of water, cold in summer and warm in winter, assists the cream to rise, but is perhaps injurious to its quality. The milk first drawn is the thinnest, and it becomes thicker and richer to the very last drop squeezed from the cow's bag. The reverse, however, is the case with the cream. The richest rises first, and it gradually becomes thinner to the last. Thick milk throws up to the surface a smaller proportion of the cream it actually contains than thinner milk, but that cream is of richer quality. If water be added to thick milk it throws up more cream but its quality is greatly inferior. Milk carried some distance, agitated and allowed to cool before putting it in pans, never gives so much or so rich cream as when put into pans immediately on being drawn. To make butter of very superior quality, separate the milk first drawn from the last—use the cream of the last only, and use only that part of the cream which rises first. Skim the milk three or four times until no more comes off; best to skim with a skimming dish pierced with small holes. The cream is then to be put into a deep vessel with a spigot close to the bottom for drawing off the thin part, which drains through to the bottom; for this, if allowed to remain in ever so small a quantity, injures the quality of the butter very seriously. It is best to cover the inside of the hole at the spigot with fine silver wire gauze, or a small piece of thin silver, pierced with fine holes, to keep back the cream. A five cent piece beat out thin would be larger than necessary. The best butter is made from cream which is not fresh, and it should be even somewhat acid. Keep the cream from three to seven days, stirring several times a day. The cream of every milking should be kept apart and the sweet and sour should not be mixed—at least not until the moment of churning.

For the Southern Planter.

Tobacco being the great staple production of our State, I have concluded to write for the Planter a short essay on its culture. For plant land I generally select creek flats in the woods. 1st, because the land is generally better than any other which is uncleared; 2d, becuuse wood is more convenient; and lastly on account of the greater safety from the ravages of the fly.

Having made choice of land for the plant bed; wood in large quantities is provided; the land cleared without grubbing; a fire made across the bed, and wood piled on at least three feet high, and about four or five feet wide. When the land is sufficiently burnt, a move is ordered, and men with long poles with hooks at the ends, pull the wood on land unburnt, and the fire is renewed by putting on more wood. Generally two hours is necessary from move to move. After the bed is burnt, the coals are carefully swept off, and the bed hoed with grubbing hoes, great care being observed not to turn over the earth, but to keep that which is burnt and the ashes on the top: fine stable manure, or that taken from hen houses, &c. is spread over the bed, which has been saved clear of grass seed; the bed being hoed over again, the roots removed which show themselves, and then well raked, is ready for seed.

An even table spoonful of seed to one hundred square yards is the quantity I prefer; one half of the seed, mixed with ashes, is sowed lengthwise the bed; and the other half sowed across the bed; then tread it well by the negroes, going entirely over it—their tracks placed side by side.

In the prize essay published in the Planter, I think the writer is mistaken in advising thick seeding; when too much seed is used the plants are long and slender (usually termed long legged) and nothing like as good as when they are not too thick. The time of year advised in the above mentioned essay, is certainly not the best in Virginia, whatever it may be in Maryland. I prefer preparing and sowing a part of my plant land before Christmas, and the remainder as soon thereafter as the weather, when the land is in good order, will allow. My plants at this time, (1st May) which were sowed early, are generally as large as a quarter of a dollar, whereas those sowed in March, the largest not more than square; and as it is of great importance to plant the crop early, it must be apparent to all persons, that early sowing is best. Tobacco plants are very hardy, and with fifteen years experience I have never known them killed by frost; nor have I ever during that time been scarce of plants. I cover also differently from the writer referred to; using bushes without leaves, laid parallel to each other, and the butts lapped on the tops of the first courses laid down; nor do I uncover until the leaves of my plants are generally as large as dollars, when they afford sufficient protection to keep the land moist. I usually burn about one hundred square yards to the hand; a smaller quantity might suffice; but as a scarcity of plants is of serious consequence to the planter, and as wood is plenty, I prefer burning largely.

The preparation of the land for the tobacco

crop will now be noticed. I prefer the ground to be ploughed in the fall or early in the winter, that the frosts may pulverize it; except such as I expect to put the coarse farm pen and stable manure on, made during the winter. In the spring this manure is got out as early as possible, spread broadcast and ploughed in, and then harrowed. The fine manure, such as is well rotted, and scrapings around houses, barns, &c. is carried out on land which was broken early. As soon after the planting of corn as convenient, I again plough the land, harrow it, and lay it off both ways (unless wet land) from three feet two inches to three feet six inches, and the hills made as soon as possible. I prefer the hills being made early, as they are more compact, and retain the moisture better when planted; but in this I differ with some of our best planters, who do not make a part of their hills until the plants are nearly large enough to be transplanted.

I always use small ploughs in the second ploughing, and in stiff clay prefer the coulter,

When the plants are of good size for transplanting, the hills are cut off at about the middle, and if hard, from remaining long after being made, the earth is loosened with the hoe in the middle of the hill; and when a season comes, (that is a good rain) the plants are set in the hills, if the season be light, (that is not much rain) the plants should be set deep and the earth pressed hard to the roots; whereas, if the land be very wet, by pressing the earth hard to the roots, it makes mortar; and if a clay soil retards the growth of the plants; therefore, in the latter case the pressure of the earth to the root should be light.

In stiff clays, during the culture of the crop, the coulter plough is all important to break the land deep, and thereby let in the rains and retain the moisture.

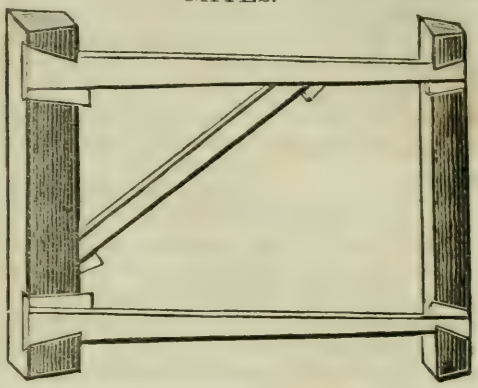
A frame with three parallel pieces and three coulters, working seven inches apart, the middle coulter being one inch longer and one foot in advance of the other two, I have found an excellent implement to be used as soon as the land gets in order after hard rains. A strong horse will pull it, and twice running in a row puts the land in beautiful order, prevents it from baking, destroos the young grass, and gives it a deep ploughing.

I expect my present communication will fill as much space as may be fairly allowed to one subject in a single number of the Planter. If you think it desirable, I will, before the time of curing the crop, give you my method. M.

Buckingham, May 1, 1841.

One of the chief objects we had in view in the publication of the prize essay was to draw forth the opinions of Virginia planters upon this important subject. The above is from the pen of a gentleman, whose success has given him great reputation, and whose connection with one of the most celebrated planters in the State has afforded him the best opportunity of becoming master of his subject. We regret that Mr. M. did not authorise us to give his name to the public, as we know it would have added great weight to his communication.

GATES.



In our last number we promised to point out a defect in the plan of a gate furnished by Mr. Bernard, which we esteem so highly in other respects. Consequently, we have had a cut made which combines Mr. Bernard's plan with the improvement at which we have hinted. The alteration is in the position of the brace; a very material point, very frequently neglected. The brace to a gate is almost useless unless it connects the top rail with the back upright so that the three may form the common crane, upon which you may hang certainly a much greater weight than the frame of a gate is required to support.

The great difficulty that we have to encounter, as has been explained before, is to prevent the common fault of swagging. There is a tendency in the whole gate to fall forward, which there is a difficulty in restraining, because the points of support are all at one extreme of the gate—being confined to the back upright. But supposing by good hinges we have succeeded in securing this upright permanently in its proper position, there is an evident tendency in the top and bottom rails, with the parts attached, to droop, because they are also united only at one extreme to this upright, which is itself the only part secured. Now, to run a support from one of these rails to the other, is as unreasonable as it would be to attempt to prop up a drunken man with a fellow who was so intoxicated that he could not stand up himself. Having your upright permanent, you may tie your top rail by a diagonal or brace in such a manner as to render it impossible to permit the extreme of the rail to drop without crushing the brace, which, applied as it is, lengthways, it is impossible to do. Having secured your top rail, you may proceed to fasten the extreme end of your bottom rail to it with the front upright, and thus

you proceed from step to step in your structure as you would in a well conducted argument, showing that there is reason even in building a gate.

We think we have now nearly attained perfection in this important point of rural economy, and we take this occasion to return our thanks to those friends and correspondents who have assisted us in accomplishing so desirable an object. If, however, any thing more remains to be said, the subject is of such universal interest, that we shall not fear to tire our readers with it.

For the Southern Planter.

LEAF MANURE.

Mr. Editor,—I am pleased to see several recommendations in your paper of the use of leaves and wood offal for compost, and particularly do I admire Mr. Lownes's idea, in your last number, of a horse rake for collecting trash. My own experience has fully satisfied me of the profit of hauling into my farm pen vegetable matter from my wood land: but my experience has also satisfied me that it will never do to rob the land where wood is permitted to grow of this, the sustenance of that growth. In other words, this nutritious substance is as much needed for the growth of trees as for the growth of corn, and you can only afford it to the one at the expense of the other. I am satisfied that I completely impoverished a very valuable piece of wood land by the annual removal, for several years, of the fall coating of leaves, whereby nothing was left to restore the depletion caused by the growth of the preceding summer. My plan now is to haul in only the unrotted vegetable matter on the surface of the land I am clearing; for when the growth is stopped, the food may be taken away for other crops. But even here, if I am about to cultivate the cleared land, I am careful to remove no mould, since it is certainly better to plough it under than to carry it to the farm yard for the purpose of bringing it back again.

Whilst undecomposed matter may be profitably removed from the surface of land on which there is no growth, I think a very erroneous and common opinion exists, and is increasing, that an indiscriminate removal of wood compost may be advantageously made. It is to remove this impression, and to afford others the benefit of my experience, that I offer this communication for the columns of your popular and useful paper.

E. W.

For the Southern Planter.

MANURE LOO.

My Dear Sir,—A party of young farmers happened to be detained by rain all night at our county court house on Monday last. Sitting round a cheerful fire, we were interrupted in a very interesting agricultural discussion, in which the prospects of the "Planter" were not forgotten by a proposition from one of our more thoughtless companions to play a game of loo. An old gray headed farmer, who happened to be of the party, replied to the youth that it had been a long time since he had been guilty of any kind of gambling, but that he would have no objection to take a hand at his favorite game, if he in turn would indulge him in a game, at which he thought he would be more at home. The young man consented to this fair proposition, and we sat down to to the table where the old gentleman lost some two or three dollars, when he proposed that his game should be tried, and as it was a slow one he said the stakes should be increased. He directed each man at the table to put up twenty dollars, which, we who knew his moderate habits did in silent astonishment. He then called the landlord and deposited in his hands the $140, with directions to give it to the man, who, by the first day of January, 1842, should have accumulated the largest and best pile of manure. He drily remarked, that if his young friend had listened more patiently to the conversation which he had interrupted, he would have stood a better chance to win the stakes.

We were all much amused with the manner in which the proceeding was conducted, although some of the party, who are not celebrated for good farming, looked upon their money as gone, and grumbled a little at the take in; but the old gentleman reminded them that to accommodate them he had played at a game of which he knew nothing, upon the express condition that he should afterwards be indulged in one of his own.

As we were riding home on the following morning, two of the company, whose road lay the same way with mine, and who perhaps were the most indifferent farmers of the party, in talking over the night's proceedings, good humoredly resolved to beat the old gentleman at his own game, and concluded that from the moment they got home they would commence scrupulously to save every thing on earth, of which they could make manure.

When we separated, my mind naturally dwelt upon the circumstances detailed, and I could not help moralizing upon the singular fact, that these gentlemen for the sake of a *joke*, were about to do that to which the strongest principles of self-interest could not prompt them.

If they succeed in winning the stake, instead of mortifying, I am much mistaken, if they do not highly gratify our old friend, and indeed, I am half inclined to look upon the whole transaction, on his part, as a happy attempt to effect that by a *ruse* which could never have been produced by *argument*. How strange it is, that men should require to be *decoyed* into measures so obviously for their own advantage. Like the sons of the old farmer in the fable, who, in digging the vineyard for gold found a treasure in

its increased product, these gentlemen, in seeking to win the stake, will probably unwittingly secure a much greater amount in the increased product of their farms. You shall certainly be advised of the result of the game. W. P.

For the Southern Planter.

C. T. Botts,

My Dear Sir—I am much pleased with your recommendation of cob meal in the last number of the Planter. I am perfectly satisfied of the value of it. Having understood that Col. Burfoot, of Chesterfield, never wasted a cob, but considered it capital feed, I took some pains to discover his mode of using them. It is as follows: Whenever he shells corn for mill, the cobs are thrown into a half hogshead of salt and water, to which his cows have access. By the time he sends to mill again, there is plenty of room for more cobs. I have tried this plan with great success. The cobs are hardly soaked by the salt water, before they are eagerly devoured by my cattle. I would as soon think of throwing away my fodder as my corn cobs.

Yours, A. B. S.

We have understood, upon inquiry, that Col. Burfoot now boils his cobs, instead of soaking them. He breaks them with an axe, and throws them into his feed kettle, and we are assured that there is no portion of its contents that are preferred to these bits of corn cob.

These plans are no doubt both good; much better than throwing away an article which contains so much nutriment; but where it could be done conveniently, we should greatly prefer to relieve the animal from the labor and trouble, which he frequently only half performs, of grinding the cob. Besides, when ground, it is food for either horse or cattle. If its nutritious qualities are admitted, there is surely as much reason in grinding the cob as in grinding the grain.

For the Southern Planter.

Traveller's Rest, near Fredericksburg,
May 22, 1841.

Mr. C. T. Botts.—I have seen the May number of your "Planter," and observe your request for some information concerning the "Fly-proof Wheat" now growing on this farm.

As it is well known, at least in this vicinity, that I have that wheat for sale as seed wheat, I must confine myself to a few concise *facts*, rather than puff it to the skies, as is too common in the agricultural papers of the North.

In the first place, then, its introduction here is not due to my father, as supposed by your correspondent, but to the Hon. John Taliaferro.

Whether, in the *abstract* or practically, the opinion of several farmers, for two or three seasons, authorise the opinion that it is *fly-proof*, and in one case, the ordinary wheat of the country was entirely cut to pieces by the fly, whilst this wheat, immediately alongside, escaped altogether.

Of its productiveness, last season, at least three bushels were made for one of the common varieties of the country. It has the largest grain I have ever seen, and is a red bearded wheat: from which it is argued by a miller, with whom I have just conversed, that it will not make superfine flour. It admits of being sown as soon as the 15th of September. My present crop is so luxuriant, that, a month past, I was advised to mow or graze it, notwithstanding a heavy harrow had been passed over it.

Respectfully, yours, J. B. Gray.

I am promised a full account of the origin of this wheat, by Mr. Taliaferro, and will forward it to you. J. B. G.

WHEAT.

We learn from the Buffalo Commercial Advertiser, that a Mr. Le Conteur, of the Island of Jersey, has been for some time engaged in making experiments on wheat; by which he has attained some most important results. By a series of careful selections and crossings, he has obtained over 150 varieties of this grain, many of them exhibiting the most valuable properties. Mr. Le Conteur has a constant eye to an increase of the grain, and a decrease of the straw and hull, and he has at last succeeded in obtaining a variety, which yields over twenty-four hundred pounds of superfine flour to the acre. His wheat is so very thin skinned, that fifty-two bushels grown upon an acre, give only five hundred and forty-two pounds of bran, middlings and shorts. This gentleman considers it quite practicable, by judicious selections, so to improve the nature of this grain as to increase the product eight bushels an acre, without any additional expense.

Mr. Le Conteur has written a work upon "Wheat" which is very much esteemed in England, and his essay "on pure and improved varieties of wheat lately introduced into England" received a prize of twenty sovereigns.

Whilst, by pursuing a similar course in this country we have much increased and improved our varieties of Indian corn, the not less important article of wheat seems to have been comparatively neglected. The gardener is constantly employed in improving and producing new varieties of flowers, fruits and vegetables, to please the eye and gratify the palate, whilst the "staff of life" remains as it was delivered to us from the hand of nature, as though it was not subjected to the laws which influence the rest of the vegetable kingdom.

ON SOAKING SEED CORN.

The editor of the Boston Cultivator reprehends the soaking of seed corn, and says it is generally abandoned by good farmers. They think that when the seed has been soaked and swollen and

then suffered to shrink before sprouting, its vegetative powers are much injured, if not entirely destroyed.

CORN *vs.* ROOTS.

The same writer expresses the opinion that if the English climate permitted the cultivation of maize, or Indian corn, that we should hear much less from them of turnips and other roots, to which their moist climate is much better adapted than our own.

COAL ASHES.

In the British Farmers' Magazine, this article is very highly recommended for its effect upon stiff tenacious soils, opening the texture and correcting the tenacity; and in a pulverized state, they are said to form an excellent top dressing for young grasses. If we mistake not, several farmers in this vicinity can testify to the value of this much neglected fertilizer, both in its operation upon stiff clays, and its beneficial effects when used in top dressing. Our city and neighborhood furnish many banks which the owners would be obliged to the farmers to remove from their doors.

GRUBS.

In connection with a theory of Dr. Harding's upon the subject of this disease, we mentioned some time since that there was reason to believe that the grub-worm is a natural inhabitant of the stomach of the horse, and not an accidental invader of a province which he seeks to destroy. The popular idea that it is the product of the egg of the gad-fly, which is supposed cunningly to deposit its nits within reach of the horse's mouth, is proved by several circumstances to be nothing more than an ingenious hypothesis; for instance, grubs have been found in the stomachs of horses in England groomed in the most careful manner, from which an egg would have been curried as soon as deposited. This would of itself be sufficient to disprove the popular opinion of the origin of the grub, but Mr. Dicken lately informed us, that Martin Pate, Col. Ambler's overseer, once mentioned to him what he considered a very singular circumstance. He said that he was once observing a very beautiful colt belonging to the Col.'s estate, about ten days old, playing and frisking about its mother, when it fell suddenly dead, without any apparent cause; upon opening its stomach, it was found filled with grub-worms; and Pate very wisely concluded, that it was impossible that these worms could have been the product of eggs, laid, taken in and hatched within ten days. Here now is a fact furnished by an individual, unbiassed in favor of any particular theory, that, if it can be sustained, must forever put to flight the idea of any connection between the gad-fly and the grub worm. Our own opinion is, that the worm may be found in the stomach of the fœtus, and if any of our friends should be so unfortunate as to lose a mare in foal, we would be obliged to them to examine the fact and report to us the result. This point is not only interesting to the naturalist but highly useful to the farmer, since by removing a popular prejudice as to the origin of a disease, we may more certainly arrive at a preventive of, or remedy for the disease.

NEW MANURE.

We entertain the most lively hopes, that, now that agriculture has gained the ear of science, some mode will be devised for condensing the fertilizing properties of manures so as to lessen the heavy expense of transportation. The inconvenience of spreading stable-yard manures operates most injuriously to their extension, which might be wonderfully increased by a separation of the active from the gross and useless particles. This property of condensation causes bone dust and poudrette to be much sought after, notwithstanding the cost of production, and the following which is extracted from the Cultivator, points out a new article, which, with the same properties, has assumed a cheaper form. The high sanction under which it is given to the world certainly justifies the trouble of an experiment:

"A short time since, a committee of the French Institute was appointed to examine the nature and effects of a new manure, represented as of extraordinary power. It was found to be composed of gypsum, saturated with urine, the mass then dried and pulverized, and applied to plants in the form of a powder. It was pronounced the most effective of a large variety of the animalized manures, so much so indeed that the committee recommended great caution in its use. A small quantity applied to corn, gardens plants, &c. gave a most rapid and vigorous growth."

CORN CULTURE.

If there is any point in cultivation which ought to be thoroughly understood, fixed, and established, one would think it should be the proper mode of treating this great staple of America. Yet, even upon this subject where our information is most extensive, the greatest doubt and discrepancy prevail. No question in husbandry is probably more disputed than the proper depth of moving the earth in the cultivation of Indian corn. The late Judge Buel, whose opinion upon any point of husbandry was entitled to the greatest respect, was very averse to deep ploughing, after planting—he conceived that the corn was injured by severing the lateral roots, and advised the frequent use of shallow culivators, after corn had been planted in ground well and deeply moved with the plough. On the other hand, Cobbett, backed, we believe, by

the opinions of a large majority of our southern farmers, recommend that corn be well ploughed and the earth carefully turned over. Cobbett imagined that severing the roots of the corn produces an effect similar to that caused by topping a tree, a re-production of a greater number of lateral shoots, which he considered as increased sources of nourishment. Judge Buel's plan, which is certainly the cheapest, is in great vogue to the North, and seems to gain popularity with time. Many of their largest crops are made with level cultivation, where a plough is never used after planting.

Let us have the experience and opinions of some of our great corn planters upon this important point. Can the cultivator be substituted for the plough with advantage?

EXPERIMENTS.

We are much pleased with a communication in the last Cultivator from a Mr. Weems, of Maryland. This gentleman, it seems, in the true spirit of agriculture, keeps a little miniature farm, upon which he makes experiments at his own risk, for the good of the community; where, however, he seems to have conducted his operations with so much judgment and discretion, that they have redounded not less to his own advantage than the promotion of agricultural knowledge. Nothing can be more philanthropic or praiseworthy in individuals, who have the requisite means and leisure, than the pursuit of such investigations. We recommend them only to the wealthy, because, experiments are attended with expense, and cannot all result as profitably as some detailed by Mr. Weems. Even the most wealthy cannot afford to make them except upon little model farms, where, like Mr. Weems's, the space cultivated does not exceed some seventeen or eighteen acres. The working of a model is a cheap and generally an effectual mode of testing the operation of a machine, and so, these experiments, conducted upon a comparatively cheap scale, may be highly satisfactory in establishing agricultural principles. And, as the mechanical arts, so agriculture has derived the greatest assistance from the experiments of men, who have been considered as visionaries, and who have too often incurred contempt for imprudently spending their means in the attainment of some scientific principle, which the scornful and ignorant world frequently reject because the *attainment* of the principle has emptied the pockets of the discoverer. Thus does imprudence in this respect frequently injure the individual without benefitting mankind.

Therefore, we repeat, that where experiments can be afforded they are worthy of all commendation, but, where they are pushed beyond the means of an individual they are not only the source of private ruin, but they operate most injuriously by exciting prejudice against the sacred cause of science. And this we hold to be the true doctrine of *experiments*.

The experiment reported by Mr. Weems has often occurred to us a very desirable one, and the result is exactly in accordance with the opinions of a very distinguished farmer in this neighborhood, expressed in our last number, viz. that tobacco is the most profitable crop that can be cultivated.

Mr. Weems kept an accurate account of the outlay and income from four acres of land, cultivated in the best manner, in corn, oats, wheat, and tobacco. He found that the tobacco (1832 lbs.) at less than 5 cents per pound netted $60. 22 bushels wheat at $1 50 per bushel netted $20. 60 bushels oats at 45 cents, $15. 40 bushels corn at 50 cents, $10.

The account seems to have been accurately and strictly kept, and is extremely satisfactory in its results.

ANIMAL MANURES.

A Mr. Tomlinson suggests, in the Cultivator, that the qualities and value of the different kinds of animal manures is dependent *solely* upon the richness and quality of the food which they consume. It is very reasonable to presume that the dung of animals derives its powers of promoting vegetation from the properties of the food from which it is formed, rather than from any peculiarity in the operations of the organs to which it is subjected.

BUSHES, WEEDS, &c.

Young farmers should remember that experience has demonstrated the advantage of cutting down weeds, bushes, &c. which it is desirable to eradicate whilst the sap is up. They scarcely ever sprout again, which is not the case if they are cut in the fall. A Mr. Peck, in the Cultivator, seems to attribute great virtue to the second quarter of the moon in June for the performance of this operation.

MACHINERY.

The farmer's objection to machinery must be overcome. The day has passed by when it was imagined that the comprehension of a farmer did not extend beyond a hoe or an axe. One great reason why other arts have advanced so far beyond the noble science of agriculture, is because of the assistance they have derived from the adoption of labor-saving machinery.

The farmer of the present day who would compete with his brethren must be a mechanic. He works with tools, and therefore, *is* a mechanic. Many of his operations are complicated, and may be much facilitated by more or less of labor-saving machinery. Let not our friends be

alarmed at the word—every tool is a machine—a plough, a saw, a plane, are labor-saving machines—simple in their action, affecting simple results. But other operations are required which may be much facilitated by the use of an implement, uniting in itself the ability to perform several operations, which must else be performed by hand. It becomes, therefore, *complicated*, and is supposed to be unfit for the farmer's use. At present, it frequently is, because no business on the face of the earth is conducted in such a slovenly manner as this favorite pursuit of agriculture. What would you think of a carpenter who did not know how to grind a chisel or whet a saw? Advise an individual, who has some capital, to commence the business of master builder, and he will tell you, "Sir, I have never served my time at the trade, I know nothing of the use of tools, and am totally unfit to take charge of a set of hands who are required to use them." Yet that same individual will embark his capital, unhesitatingly, in a business much more complicated, about the tools and implements of which he is still more ignorant. Why is this? Because, in the first case, he knows that he would encounter skill with which his ignorance could not compete, and in the latter his products come in competition only with those of persons as ignorant as himself. We want schools of agriculture—opportunities of serving an apprenticeship to this complicated, scientific, mechanical trade of profession, upon which all others depend. Nature may make *poets*, but depend upon it, she has never yet tried her hand at *farmers*. A genius may be self-taught, but to expect the great mass of mankind to arrive at excellence in so complicated a branch of the arts, by their own unassisted exertions, is the height of folly. If, instead of the rude unskilful botches who now cultivate the earth, you could make every farmer a master workman, thoroughly skilled in his business, the wealth of the country would be more increased than it can ever be by tariffs, created by legislative enactment; and he, who devotes his mind to effecting this great desideratum, will do more for his country than can ever be accomplished by visionary schemes of producing wealth without labor.

We are daily brought in contact with individuals who are called *good farmers*, who are ignorant of the simplest principles of mechanics. Many of them do not actually understand the principles of a plough, are not aware when it is out of order, and could not for the soul of them superintend the grinding of an axe. Show them a labor-saving machine, which requires a small degree of mechanical skill to operate it properly, and they turn away in disgust. "Such a machine," say they, will never answer for my negroes; it is not worth while to examine it." But can't you teach your negroes to manage it? No; because I am as ignorant, as lazy, and careless as they are, should be the reply. We firmly believe that two-thirds of the labor now employed in agriculture could be saved by the use of machinery—but never by such as is to be operated only by men, who will not learn to comprehend and teach others the principle upon which one cog wheel drives another.

We are very often asked could not a machine be contrived to perform such and such an operation? Yes, without any difficulty. Could it be worked by negroes? We answer no. Nor by white men either, unless they will take the pains to understand it and keep it in order. What an exalted opinion must such persons entertain of the capacity of their negroes, to imagine, that, without instruction, they can understand and manage a machine required to perform at once the work of a half dozen different hands. This is a perfection to which we solemnly believe neither negroes or machinery will ever arrive, at least, in our day.

There are undoubtedly differences in machines, and simplicity is the great desideratum. Many of them are entirely worthless either from defect of principle or indifference of workmanship, and if the farmer discards all because he has not learned to distinguish between the good and the bad he is to be pitied for his ignorance, and must be content to remain in the rear of those better skilled in his profession. We have generally found that active, industrious, practical farmers were the men to appreciate a valuable improvement in agricultural machinery, the principles of which they make it their business to understand thoroughly, whilst the mere theorist, who, full of science, lays abed until ten o'clock in the day, very properly declines putting such an article into the hands of his negroes who would probably destroy it while he was asleep.

In short, farmers must second the efforts of ingenuity to apply science to agriculture, and this can be effected only by their becoming thoroughly versed in those mechanical principles that are applicable to their profession.

CORN.

The following comes a little too late for the Virginia crop, but our farmers may treasure it up as derived from one, who is, we believe, considered high authority. The editor of the Boston Cultivator says:

"Corn should not be buried more than one inch deep in any soil. It starts more vigorously at this depth than when put deeper in the earth. Corn and cucumbers require a great share of warmth, and it is quite absurd to endeavor to hide such productions from the genial warmth of the sun.

ASHES ON CORN.

Those who plant corn on green sward land should endeavor to procure ashes to put on each

hill; and the sooner they are dropped after the corn is covered the better will be the effect. We warn the inexperienced against putting wood-ashes *into* the hill with the corn lest the strong lie which they soon make should destroy the young shoots from the kernel. Ashes have a tendency to drive away worms, and they always promote the decomposition of the matter contained in the green sward. Those who have poudrette to apply can put it in the hill with the corn, or they can put it on the hill as they do wood-ashes. When applied to the surface it should be done just before the first hoeing, as the corn will take care of itself as soon as its roots have extended to the spread manure.

MODE OF FURROWING.

Most people use a horse plough to mark out the rows for the corn—some plough each way in order to make the rows more straight. There is much labor in this and to very little advantage; for whether we pass the plough along once or twice we generally form a hard and low bed for the reception of the seed. If the field has been well ploughed and harrowed we make a far better bed for the corn by simply dragging a chain—or what is still easier—by letting the horse drag a simple frame over the ground, with two or three teeth in it, set at a proper distance from each other—we can then mark out three rows at a crossing and leave a trench well prepared for the seed. A little frame with two teeth only, will accomplish twice as much as a plough, and it may be made by any man in half a day."

We concur fully in the propriety of shallow planting, and consequently in the mode of furrowing. Much of the necessity of replanting, we believe, is produced by putting the grain beyond the reach of the genial rays of the sun.

We hear much complaint of the evil habit alluded to in the following, from the Boston Cultivator, and hope it may afford a satisfactory answer to the numerous inquiries for a remedy for it. A gentleman in this vicinity a short time since remarked to us that he was inclined to think that the use of animal food had a tendency to produce this unnatural habit, as he had observed, that sows purchased from the city, raised in a great measure from the offal of tavern tables, had been almost universally addicted to the practice of destroying their pigs.

BREEDING SWINE.

Farmers who raise their own pigs should be very careful to let the breeders have room enough and not to disturb or shift them from pen to pen for some weeks before littering. Sows will often devour their own offspring when shut up in close pens, or when disturbed about that time. Some good farmers practice throwing into the yard some pieces of *salt pork* or other *meat*, on the supposition that the female has an unusual craving for animal food at this season, and that this occasions her unnatural destruction of her young. Great caution must be used in feeding the mother during the first twenty-four hours—if she be then cloyed with food she loses her appetite and will pine for a long time in consequence of it.

CARE OF COWS.

At this season of the year milch cows should have a little meal daily—one quart will be sufficient. Meal is far preferable to roots for new milch cows. Roots may be given when cows begin to give a diminished quantity of milk, but now, and on their first going to grass, they need something to sustain them rather than to cause their milk to flow more freely.—*Boston Cultv.*

HOGS.

Many of our farmers are of opinion that the popular mode of soiling is injurious to the health of hogs, we therefore quote the following directions from the Western Farmer, which seem to be sound and reasonable:

"It has been affirmed that hogs do not thrive well if confined in a pen and soiled with clover; for ourself we are not a believer in this faith, unless where from neglect or abuse of this kind of feeding takes place. When the hog roams at large he has a chance of being his own physician, in the fields or woods on which he may graze he finds numerous herbs and other substances which serve as medicaments to correct the enervating effects of his exclusive vegetable diet; and it is, therefore, but reasonable, when he is cut off from these, that he should be furnished with substitutes to keep down the baneful effects of the crudities of those substances which he receives into his stomach. All vegetable bodies which are edible are charged with more or less of acidities, the which, if permitted to remain uncorrected, will prey upon and vitiate the digestive organs. At this point, then, nature must be assisted, and it may easily be done. Rotten wood, charcoal, chalk, if placed in a convenient part of the pen will be readily partaken of by its tenants, and will preserve them in health. In addition to these it will be found serviceable to mix moderate portions of flour of sulphur and copperas occasionally with their messes.

"If the hogs be confined in a pen altogether, they cannot be kept with too much regard to their comfort and cleanliness, for although when permitted to range they luxuriate in mud and filth, under the former circumstances, their bedding should be frequently changed, and their bodies in warm weather receive the benefit of periodical ablutions. With these precautions, and proper feed, to be given at regular intervals, there is no question but that they will not only thrive well, but prove a profitable stock to any farmer who may thus try the experiment of raising them."

ADVICE TO HOUSEWIVES.

Those who make candles will find it a great improvement to steep the wicks in lime-water and saltpetre, and dry them. The flame will be clear and the tallow will not "run."

Britannia ware should be first rubbed gently with a woollen cloth and sweet oil; then washed in warm suds and rubbed with soft leather and whiting. Thus treated, it will retain its beauty to the last.

New iron should be very gradually heated at first; after it has become inured to the heat, it is not likely to crack.

It is a good plan to put new earthen ware into cold water, and let it heat gradually until it boils, then cool again. Brown earthen ware particularly, may be strengthened in this way. A handful of rye or wheat bran thrown in while it is boiling will preserve the glazing, so that it will not be destroyed by acid or salt.

Clean a brass kettle before using it for cooking, with salt and vinegar.

The oftener carpets are shaken, the longer they will wear; the dirt that collects under them grinds out the threads.

If you wish to preserve fine teeth, always clean them thoroughly after you have eaten your last meal at night.

Woollens should be washed in very hot suds, and not rinsed. Lukewarm water shrinks them.

Do not wrap knives and forks in woollens—wrap them in good strong paper. Steel is injured by laying in woollens.

Brass andirons should be cleansed, done up in papers, and put in a dry place during the summer.

When molasses is used in cooking, it is a prodigious improvement to boil and skim it before you use it. It takes out the unpleasant raw taste, and makes it almost as good as sugar. Where molasses is much used in cooking, it is well to prepare one or two gallons at once in this way at a time.

Never allow ashes to be taken up in wood, or put into wood. Always have your lamp and tinder box ready to use in case of sudden alarm. Have your important papers all together where you can lay your hands on them at once, in case of fire.

Use hard soap to wash your clothes, and soft to wash your floors. Soft soap is so slippery that it wastes a good deal in washing clothes.

It is easy to have a supply of horse radish all winter. Have a quantity grated while the root is in perfection, put it in bottles, fill it with vinegar, and keep it corked tight.

Western Farmer.

THE HOLLOW-HORN—A FAIR OFFER.

Within a few days we have heard several farmers from the surrounding country complain that their cattle have the hollow-horn. We have had a little experience in the management of cattle, and know something about this "hollow-horn," and are satisfied that it is nothing more or less than an attendant, a sort of hanger-on, of that worst of all diseases among cattle, the "*hollow-belly.*" We know men who have cattle that during the whole winter have been exposed to the "pitiless peltings" of the storms, with a snow-drift or an ice-cake for a bed, with nothing but a scanty pittance of prairie hay or musty straw for food, and who now wonder that their cattle have hollow-horn! The wonder should be that they have cattle living.

We will make the following proposals to all those owning cattle. Keep them under shelter during the storms and cold weather of next winter. A hovel, built of logs, and covered with coarse hay and straw, standing in a dry place, is sufficient for this. Salt them twice a week regularly; give them a sufficiency of wholesome provender, and at all times, and each of them a mess of potatoes or turnips at least two or three times a week. Follow these directions fairly, according to their true intent and meaning, and in the spring we will engage to pay for all the damage you have sustained by the "hollow-horn."—*Fort Wayne Sentinel.*

We do not mean exactly to endorse the obligation of our friend of the Sentinel, but his offer certainly evinces some confidence in the truth of his theory. We recollect to have heard an old gentleman declare once, probably upon the same principle, that a good farmer would always be ashamed to complain that his cattle had the hollow-horn.

PLOUGHING IN GREEN CROPS.

It is a well known fact that an extraordinary development takes place in plants, in a few days, whilst they are engaged in maturing their seeds. Now, this addition, like the rest of the growth, is derived as well from the air as the earth, so that when the plant is turned in much more is restored to the earth than has been taken from it. Hence the improvement effected; but vegetables should never be interrupted whilst they are engaged in making this ærial collection for the earth. We should always wait until they have performed their office, which ceases only with their vitality. To turn in *green* crops is about as wise as it would be to gather them in the same state.

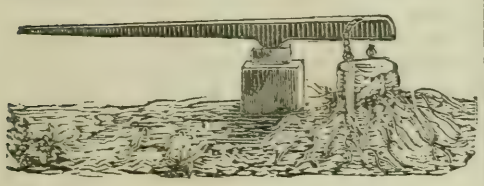
BEES.

A Mr. Jeston, in an English journal, recommends the following simple mode of constructing a bee-hive. He says:

"Some years ago I placed an empty butter-tub under the board on which the hive rested; the sun cracked the board, and the bees enlarging the opening, took possession of the tub, and after

filling their own hive, deposited 26 lbs. of honey and comb in the tub below. This I took possession of for my own use, leaving their hive full of honey for their winter's consumption.—By improving on this simple plan, I have carried off the prizes for honey at the Henley Horticultural Society for the last four years. A board, half an inch in thickness, eighteen inches in width, and perforated with two holes, each an inch in diameter, is placed between the hive and the butter-tub. The tub should be placed under the hive as early as March; the bees having a great dislike to any disturbance of their arrangement. I last year took upwards of 40 lbs of honey in this way, although the season was so bad, and an ample supply of food was left for the bees to subsist on during the winter. This plan will prove a good substitute for the 'rear' used to enlarge the common hive; with this advantage, that a supply of honey can be obtained from the strong swarms as well as the old hives."

STUMP EXTRACTOR.



We have been asked by a correspondent, if the laborious work of grubbing could not be lightened by some mechanical contrivance. We are sure it can be, not entirely substituted, but *lightened.* Contrivances have been adopted for tearing the stump from the earth without any previous digging or cutting, but they have, we believe, like the Indian's gun, "cost more than they come to." It is a violent operation, requiring an immense power, which must also be portable, two qualities generally incompatible. But after digging round and cutting the largest roots, a great deal of time is required for severing the smaller ties by which the stump is still bound to the earth; the smallest of which is sufficient to resist considerable efforts, which must be applied to the stump at such mechanical disadvantage. To obviate this difficulty, various contrivances have been successfully resorted to. A very effectual method is the use of long, strong levers, embracing the flattened sides of the stump and screwed against it by long iron bolts, passing through the two on each side of the stump. Horses, if necessary, may be attached to the end of the levers, and they will readily twist off many of the smaller roots, which it would cost much labor and trouble to get at with the axe.

We intended to have given a cut of this fixture, which we consider the best contrivance for the purpose with which we are acquainted; but our engraver, by mistake, has represented another method that is even still cheaper, but not so effectual. This is neither more nor less than a common lever with a fulcrum for prizing up the stump—but much less power is required for twisting in two, than tearing apart, the fibres of the root. We have also seen representations of a compound lever upon three legs, which straddles the stump, and prizes it up in a similar manner. Much labor may be saved in clearing by the use of any contrivance of the sort.

We have known gunpowder tried for blowing up the stump, without, however, any great success, owing probably to imperfection in the apparatus.

Clearing land is a heavy business, and affords a fine field for the exercise of ingenuity in lightening the labor.

We were highly gratified by a visit paid a few days since to the machine shop of our townsman, Mr. Jabez Parker.

Mr. Parker has been long and favorably known as the inventor and manufacturer of several agricultural machines. His straw-cutter has been much approved, and his threshing machine, we believe, is acknowledged to be the best in this part of the country. His corn-sheller, which received the premium at the late agricultural exhibition in this city, is a very strong and efficient machine. We saw an excellent wheat-fan, and Mr. Parker informed us, that a chain band horse power, which he manufactures, is much approved and in great demand.

Mr. Parker's long and continued exertions to supply the country with the best agricultural implements entitle him to this notice, and the support of the farming community.

BONE DUST.

The Louisville Journal notices a communication in the April number of this paper from the pen of Mr. R. G. Haden, upon the subject of this manure, and to satisfy Mr. Haden of its *permanent*, as well as immediate effect, publishes a letter from a Scotch farmer, who testifies to experiments made upon two separate fields with bone dust and stable manure, where the proportion of the former to the latter was as one to twenty-eight. Each field was cultivated for five years in consecutive crops of turnips, barley, hay, pasture, and oats, and to the very last, the crop, upon the field manured with the bone dust, manifested a decided superiority. We are informed that every year only adds to the reputation of this valuable article in England.

POUDRETTE.

In answer to some inquiries made in the Farmers' Magazine, as to injury likely to result from an applica-

tion of lime to night-soil; whereby a strong smell of ammonia is evolved, a Mr. Brabyn states that it is highly objectionable, inasmuch as a chemical action is produced by which the ammonia, so valuable to vegetation, is lost: he recommends the use of gypsum or plaster of paris, instead, which destroys the odor and preserves the fertilizing properties unimpaired. He says:

"There does not appear to be any manure so rich in nitrogen as human excrement (except bone manure, which contains upwards of thirty per cent. of gelatine in its interstices;) so much so, that according to the analysis of Macaire and Marcet 100 parts of human urine are equal to 1,300 parts of fresh dung of the horse, 600 parts of the cow, and 450 parts of the urine of the horse. Hence it is evident that it would be of much importance if none of the human excrements were lost, especially when we consider that with every pound of urine a pound of wheat might be produced. Now I would suggest to your correspondent the best and most economical method I know of preserving unimpaired the most valuable element in night soil, which is as follows: To every 100 lbs. of night-soil add 7 lbs. of sulphate of lime (gypsum) in powder, a double decomposition will ensue, and the result will be, instead of sulphate of lime and carbonate of ammonia, carbonate of lime and sulphate of ammonia; the latter a soluble salt which cannot be volatilized. It might now be mixed with other compost, or dried any way thought proper, and applied to the roots of the vegetable, to be again transformed into bread, butter, cheese, &c.

"I would also suggest that if the floors of stables be strewed from time to time with a little sulphate of lime, they will lose all their offensive smell, and none of the ammonia which forms can be lost, but retained in a condition serviceable as manure. In close stables the horses' health would be better preserved, and they would not be so liable to get blind as now. $1\frac{3}{4}$ lbs. of sulphate of lime will fix as much ammonia as is produced by 100 lbs. of horse's urine."

BONE MANURE.

As this fertilizer comes to be more and more appreciated, a cheap and ready method of reducing bones to dust is more and more of a desideratum. It may be that decomposing will be found more available than pounding. A writer in the New England Farmer asserts that he has found bones thrown by his wife into the ashes of which she makes her soap entirely decomposed, and it is stated in a report of the agriculture of the House of Industry at Boston, that bones with earth, one part bone and two parts earth, laid in a heap and moistened with cow yard wash or water, and turned over often, will become completely decomposed in about two months.

NOMENCLATURE OF GRASSES.

Through the active enterprise of Mr. Ruffin, of the Farmers' Register, whose exertions in the cause of agriculture are untiring, Mr. M. A. Curtis, of Washington, N. C. has been induced to undertake a labor, which will go far to obviate the confusion that arises from the different names by which the same grasses are known in different sections of our country. Mr. Curtis proposes to make a collection of specimens, and by a comparison ascertain *exactly* the various names bywhich the same plant is known. The advantages of such a record will be obvious, and we freely offer our aid in furthering the laudable enterprise.

The following is Mr. Curtis's letter to Mr. Ruffin, in which he gives directions for collecting and preserving specimens.

We hope that it will be sufficient to enlist the aid of many of our readers in lending their assistance to the accomplishment of this desirable object.

DIRECTIONS FOR COLLECTING AND PRESERVING SPECIMENS OF GRASSES.

Washington, N. C. March 8, 1841.

To the Editor of the Farmers' Register:

Dear Sir,—I now send you, as promised, the mode of collecting and preserving specimens of grasses.

1st. As to the time of collecting. This should be when the flowers are fully grown, but before they begin to fall off. If any one is in doubt as to what are the flowers of grasses, the easiest way to inform him is to say, that whatever is not stem or leaves will be the flowers. They have a great variety of forms, but the above rule will readily determine them.

2d. The whole plant should be collected, not excepting the root, though the dirt should be entirely removed. Of the large coarse grasses that attain a height of three to five feet or more, a foot or two of the summit will answer. Plants should never be collected when wet.

3d. Take half a newspaper and fold it once, like a sheet of cap or letter paper; then place within it as many plants as there is room for without their overlaying each other.* Thus do with as many plants as are collected.

Now lay these sheets between other newspapers (called driers) alternately over each other; that is, first a drier, then a sheet with the plants in it, then a drier again, and so on, no matter how large the pile.

The parcel should now be put under a pressure of from fifty to a hundred pounds and remain for about twelve hours, when the driers should be removed and *dry ones* put in their places. Three days will be sufficient for drying grasses, changing as above every twelve hours. For a press, a piece of board large enough to cover the paper might be used, with a rock, some large books, or a heavy trunk, for a weight.

* If the plant be longer than the sheet, it may be bent over, or broken, though not severed.

When the plants have been thus dried, they can be put away in dry papers, enclosed in a newspaper and tied round, so that they may not be injured by being broken or tossed about. They should be put away in a drawer where they will not suffer from careless handling.

4th. In transporting them, care should be taken that they get no injury from rubbing, which will happen if they are loose. They should, therefore, be packed tight enough to avoid that. When carefully tied up or sealed, they can be conveyed to any distance in a trunk by private conveyance; or in a small box made to the size of the parcel may be sent by any of the ordinary public conveyances. Boxes of plants are yearly traversing the country in this way.

If the work you have put upon me is worth doing, it is worth doing well; but this cannot be attained without the aid of those who are more particularly interested in it. I hope, therefore, that no one will leave for somebody else to do what he can so easily do himself. The grasses within the reach of any one man, the names of which he is acquainted with, are not very numerous, and the trouble of preparing two or three specimens of each will be trifling. It must be the agriculturists who will do the work of furnishing the common names, for botanists are generally professional men who are very imperfectly acquainted with them. I will, however, draw upon them personally for their knowledge, if you will secure the labors of the farmer in this work.

If it will furnish any new inducement to the agriculturist to engage in the plan, I will promise to return him his plants, if desired, *properly named*, so that he may have specimens in hand to refer to in cases of doubt.

Very respectfully, yours, &c.

M. A. Curtis.

WHITE CARROTS.

The popularity of ruta baga, mangel wurtzel, and even the sugar beet is threatened by this new candidate for popular favor. The English papers are making a good deal of noise about it, and we believe the seed may be obtained at the North. We have always esteemed the carrot the best of the roots. They are known to form an excellent food for horses as well as cattle, exercising a healthy influence in the spring of the year, particularly. They are very nutritious, and this is said to be an improved article both in quality and productiveness. We advise our friends to procure some of the seed as soon as possible, as we foresee, that whatever be its real merits, it is about to have its day.

TO RELIEVE CHOKED CATTLE.

A Mr. Jones, in the Nashville Agriculturists, says that all you have to do to relieve choked cattle is to raise the fore foot for the purpose of relaxing the muscles of the leg; then tie a strong string around the arm just above the knee, and if the animal does not put the foot to the ground a quick stroke with the whip will make it do so, when the operation is performed, and the animal relieved. He does not pretend to give the rationale, but asserts that the effect is certain.

PEACH TREE WORM.

We see, from the Western Farmer, that some individual, upon the same principle as that adopted by Dr. Anderson, and recorded in our last, has been trying experiments to protect peach trees from its destructive enemy, the canker worm. Tansy and wormwood were planted nearly in contact with the body of the tree, and were found as effectual in keeping off the worm as tobacco and camphor are in preserving clothes from the moth.

We were struck by the following, in the Main Cultivator, because it is only a few weeks since Major Yancey, speaking of the advantages of the value of the hemp crop, stated, that circumstances coming under his own observation, had inclined him to think, that a strip of it between wheat and corn would form an effectual barrier to the advances of the chinch bug from one to the other; though, he expressed an unwillingness to give the opinion to the public, until confirmed by further experiments:

SECURITY AGAINST THE WHEAT FLY.

When there is an abundance of clover or hemp around a wheat field, it has been ascertained to a certainty, that very much less injury will be done to the wheat by the grain flies than in most other situations. The reason is plain. The weevil deposits its eggs on the sweetest plants it can find, and prefers the clover or hemp even to wheat.

NEWSPAPERS.

Mr. Jefferson, whilst a minister in France, wrote to a friend in this country, Col. E. Carrington: "Were it left to me to decide, whether we should have a government without newspapers, or newspapers without a government, I should not hesitate a moment to choose the latter."

TO CUT GLASS WITH A PIECE OF IRON.

Draw with a pencil on paper, any pattern to which you whould have the glass conform; place the pattern under the glass, holding both together in the left hand, (for the glass must not rest on any plane surface;) then take a common spike or similar piece of iron, heat the point of it to redness, and apply it to the edge of the glass; draw the iron slowly forward, and the edge of the glass will immediately crack; con-

tinue moving the iron slowly over the glass, tracing the pattern, and the chink in the glass will follow at the distance of about half an inch, in every direction according to the motion of the iron. It may sometimes be found requisite, however, especially in forming corners, to apply a wet finger to the opposite side of the glass. Tumblers and other glasses may be cut or divided very fancifully by similar means. The iron must be re-heated as often as the crevice in the glass ceases to follow.—*New York Mechanic.*

NAGORE BULL.

We present our readers with a portrait of a Nagore bull, an Indian breed of cattle lately introduced into England. From the description of them which we extract from the work published by the Society for the Diffusion of Useful Knowledge, we are inclined to think that from them might be obtained a cross which would unite the quickness of the horse with the endurance of the ox. Indeed they seem to unite in themselves the combination of these properties in a wonderful degree.

"They were bred by Lieutenant-Colonel Skinner, at his farm at Danah, near Pokah, on the borders of the Bichaneer desert, 100 miles to the westward of Delhi. They are not buffaloes, but of the highest breed of Indian cattle. They are used in India by the higher orders, to draw their state carriages, and are much valued for their size, speed, and endurance, and sell at very high prices.

"Colonel Skinner has a large stock of them; and six or seven beasts are always kept saddled to carry the military despatches. They remain saddled three or four hours, and if not wanted in that time, fresh ones are brought out to relieve their companions. They will travel, with a soldier on their back, fifteen or sixteen hours in the day, at the rate of six miles an hour. Their action is particularly fine—nothing like the English cattle, with the sideway, circular action of their hind legs—the Nagore cattle bring their hind legs under them in as straight a line as the horse. They are very active, and can clear a five-barred gate with the greatest ease. Mr. Perkins has a calf which has leaped over an iron fence higher than any five-barred gate; and the bull frequently jumps over the same fence in order to get at the water, and when he has drunk his fill, leaps back again.

"The bull (Jupiter) was in high condition when exhibited. He was employed in a light cart, and various jobs about the farm: sometimes he goes fore-horse in the wagon-team, to deliver corn; he also drags the bush-harrow, and draws the light roller over the ploughed land. He is very docile and tractable, when one man drives him, and attends upon him, but he has, now and then, shown symptoms of dislike to others.

"He is fed entirely on hay. Except that when he works, a little bran is given to him, and in the turnip season he is treated occasionally with a few slices of Swedes, of which he is very fond. He was at first very troublesome to shoe; and it was necessary to erect a break in order to confine him. He was unwilling to go into it for some time, but now walks in very contentedly.

Mr. Perkins very properly observes, that the chief advantage of these Brahmin bulls would probably consist in their speed and strength, in both of which they surpass any of our breeds."

HENRICO AGRICULTURAL SOCIETY.

The first exhibition of this institution was held, as advertised, on the 26th ult. In interest and effect it exceeded the anticipations of its most sanguine friends; the exhibition generally was of the most respectable character, whilst that of the hogs, particularly, elicited the warmest approbation. Notwithstanding the extensive preparation, the crowd was very great even at an early hour of the morning. The grove, in which the assembly was held, is most appropriate for the purpose, but was hardly sufficient to accommodate the numbers that thronged to hear the address. The yard with its beautiful spring and lofty trees lent an additional charm to the scene. Here was to be seen the beauty and fashion of the city mingling with the sweetness and simplicity of the country. The glowing sun and refreshing shade, the city belle and sturdy yeoman, the anxious countenance of the competitor and the careless face of the spectator, formed a *tout ensemble* of the most pleasing description.

The ceremonies of the day were opened by a prayer of the most impressive and appropriate character from the Rev. Dr. Empie, of St. James's church, which was followed by the address of the President.

Of this address it is sufficient to say, that the portion devoted particularly to the proper management of a farm, was, like its author, sensible and practical in the highest degree. So valuable do we consider it, that, although our limited size and plan of condensation forbid the publication of any *speech*, we yet design to obtain a synopsis of these remarks for a future number. Although we did not coincide entirely in all the incidental remarks, some of them met our entire approbation, and satisfied us, that the Parson was as skilful in the use of the lighter weapons of ridicule and satire as he had evinced himself to be in the heavier ones of reason and argument. In passing, we cannot forbear to notice a most severe and caustic hit at the last Legislature, who, representing an agricultural community, a people seven-eighths of whom are farmers, were only by great exertions, importuned into doing so much for the agricultural interest, as to grant leave to certain individuals to meet, if they chose, *at their own expense*, and take into consideration the wants and wishes of this great interest. And this mighty boon they dignified with the name of a Board of Agriculture.

It is indeed an anomaly, that an interest, so powerful and so extensive, having the entire control of the legislation of the country, should find so great a difficulty in obtaining the passage of an act as impotent and powerless as the one establishing this same Board of Agriculture.

It is a crying evil that this subject of most general and vital interest should be so totally neglected by those whom it concerns most nearly. The remedy, Mr. Turner thinks, is to be found in the election of men, who are valued, more for their devotion to the true interests of the country, than for the ability to make garrulous and empty oratorical displays.

WHEAT.

Since the receipt of the letter from Mr. Gray on our 89th page we have been politely favored with the following from the same source. We shall procure from Mr. Gray a specimen of his crop for examination and probably a small quantity for sale.

Mr. Botts,—I herewith forward the letter of Mr. Taliaferro, giving a further account of the *fly proof* wheat.

Up to this date there is no appearance of fly in my crop, whilst an adjoining field is materially injured by that insect.

Respectfully, J. B. Gray.

June 3, 1841.

Hagley, May 22, 1841.

Dear Sir,—Your note, desiring a history of the wheat you had of us last fall, is received, and I regret that my information, in regard to its origin, does not enable me to give such an account of it as may be satisfactory to you, or to your agricultural friend in Richmond. In a conversation with my friend, Dr. A. Naudaine, United States Senator from Delaware, about five years since, on agricultural topics, I mentioned the ruinous ravages committed by the Hessian fly on our crops of wheat in Virginia, whereupon he informed me, that the farmers in Delaware had for some years cultivated a species of wheat entirely exempt from the ravages of that insect; and he kindly offered to send me a specimen of

it for trial. Accordingly five years since he sent me a fraction over two bushels of this wheat, and we now have the fifth crop of it, and a remarkable fine one it is, without the least injury from Hessian fly, or rust, two formidable adversaries to wheat. During all this time our other descriptions of wheat, in juxta position in the same field, and often on very superior land, as well as that of our neighbors, have been seriously injured both by fly and rust. Such is my experience in regard to this wheat, and such is the result in all cases where it has been tested by many to whom we have furnished it the last two years for experiment. A few facts in relation to this wheat will satisfy any farmer why it escapes the Hessian fly *necessarily*, and why it is more exempt from rust and rot, than any other winter wheat. It will be found, by all who try it, to possess more energy of root than any other known wheat. So that if seeded, as it ought to be, between the 15th and 25th of September, though the fly will attack and cut off the fall shoots, its energy of root is such as to leave that uninjured. And in the spring, owing to this energy of root, the growth is more vigorous and rapid than any other winter wheat, so that by the 15th of April, a few days before the spring fly begins to hatch, the ground-joint of this wheat becomes hard and sapless, and consequently free from the spring ravages of the fly. This wheat ripens about one week earlier than any other winter species, and is, therefore, more exempt from rust and rot. All I could learn of Dr. Naudaine as to the origin of this wheat was, that it came from Germany, but by whom it was introduced into Delaware he could not inform me. All who cultivate this wheat should not omit to sow it between the 15th and 25th of September—in all that month will do. It should be seeded thick, because if thin, the uncommon weight of the head will bear much of it down. And it should not be harvested till fully ripe, for if cut in the milk state, the grain assumes a dark and unsightly aspect. Unless we could get rid of the Hessian fly, I have never known so desirable a species of wheat as this.

I am, dear sir, faithfully yours,

J. B. Gray, Esq. JOHN TALIAFERRO.

HOGS.

It is with great pleasure that we lay the following before our readers, which we are sure, from the reputation of the author, particularly in this special department, will form the introduction to a series of most able and interesting essays upon this popular subject:

To the Editor of the Southern Planter.

Dear Sir,—My conscience has been troubling me for a considerable time past, and I have determined to relieve it. The cause of my trouble is, that I have been feasting on the rich stores which you and your correspondents have spread before me, and I have contributed nothing in return. Feast after feast has been served up for me, whilst I have done nothing to swell the repast. I confess in the onset, that I have very little talent in catering in this way. I have notwithstanding, resolved to try; and if no other good results from the effort, I shall at least relieve my troubled conscience.

I have, therefore, resolved to prepare, as may be convenient to myself, a few short practical essays, which I hereby offer for publication, in the Southern Planter. To these essays, laying aside all false modesty, I intend to append my own proper name. I prefer that they should appear in this form; for if they have any merit, I wish to have the credit of it, and if they tend to my reproach, let the blame attach to the proper person.

The subject on which I propose to treat is the hog—an humble subject, I am aware, in the estimation of many. But with your aid, I think I can make it appear an important one. I wish you, therefore, Mr. Editor, whilst I am engaged in other matters, to sit down in your office and to calculate what it costs to supply the eastern section of Virginia with bacon for one year. If, in your estimate, you include the large droves of hogs which come to our several markets, all of which were sold last year at from $7 to $7 50 the hundred pounds; and if to this you add the almost incredible quantities of bacon which are disposed of among us at various prices, I am persuaded you will find the hog business a no small affair. Now it is to arrest this immense expenditure, and in lieu of sending these vast sums to the West, to keep the whole among us, that I propose writing the following essays. To illustrate my purpose, I will suppose a case of continual occurrence. The farmer, after supplying his family with bread and clothing, has a surplus of corn, of wheat, of tobacco, or of some other article. This he sends to market and disposes of it to the best advantage in his power. But it is certain, that the poor man is no better off than if he had no surplus at all; for it takes all the money he can raise in this way to procure meat for his family. But suppose that, in addition to the other necessaries, he raises his meat and still has a surplus; why here is at once an amount with which he may pay his debts (and this ought always to be his first course) or may add it to his capital, or improve his farm, or expend in any other manner he thinks proper. Now it is evident that in the latter case, the man is improving his condition, whereas in the former he is going backward, or at most remaining stationary.

The great question at issue is simply this: Can meat be profitably raised? The proper solution of this question depends upon certain circumstances which I shall now detail. It cannot be raised to a profit when corn, the chief article

FROM
W. N. HUTT,
STATE HORTICULTURIST

of their support is very high, nor with a stock of hogs deteriorated and broken down by the unnatural system of breeding in and in. But under other circumstances—with corn *not* very dear, and with a stock healthy and vigorous, I believe and I undertake to prove that it is to the interest of every farmer to raise meat, at least, to the amount of his own consumption. I undertake to go further and to show that with *many*, it would be a profitable business not only to supply their own wants, but to furnish a surplus for the market. In treating of this subject, I must direct the attention of my readers to the three following things:

1st. To the most profitable stock of hogs;
2d. Their comfortable accommodation; and
3d. Their treatment in general.

These three propositions will probably furnish matter for three or more separate essays, which (should my life be spared) I authorize you to expect. Having now relieved my conscience, in some measure, I will defer till your next number what I have further to say on this subject.

J. H. Turner.

AGRICULTURAL SOCIETIES.

The result of the late exhibition of the Agricultural Society of Henrico has filled us with the most pleasing anticipations of what is to be effected by this means in Virginia.

We congratulate the members of that Society and the agricultural community generally upon the most decided success of this exhibition. The fate of this laudable enterprize is no longer doubtful. The zeal, the ardour, the interest, manifested on that occasion by its members and visiters generally are the surest presages of the dignity at which it is destined to arrive. Already has it excited a spirit of improvement and a pride of husbandry that entitle its originators and supporters to the appellation of public benefactors. If the people of Virginia could only know the interest that has been awakened in this neighborhood by a single exhibition, every county in the State would have its agricultural society. Every neighborhood would organize, and every individual would lend himself to the cause. Information would be gathered and scattered—agriculture, which is the favorite and natural pursuit of our people, would be elevated to its highest standard, and our proud old State would resume the station for which nature and nature's God designed her.

The commerce and trade, the wealth and importance of the State must depend upon her agriculture. Is not this sufficient to urge every Virginian to lend his whole soul to the improvement of this noble art? This improvement can only be effected by the dissemination of information, and we hold the opinion, expressed to us by an eminent friend lately, that agricultural societies and agricultural papers are the only means by which the information of *each* can be extended to *all*. In the name of Virginia then, a name never yet disregarded by her sons, we call upon you to arouse and strike one blow for the prosperity of your native State—unite your strength—form associations in every hamlet for the dissemination of agricultural knowledge. Knowledge is power—and he, who increases the knowledge, elevates the standing and strengthens the position of his people. The true patriot will ever seek this mode of serving his country, and we ask again, if it is possible for him to do so more effectually than by a resort to agricultural exhibitions, which excite pride, and draw forth information from its most secret recesses.

Upon this subject we are glad to find that our countrymen are beginning to be aroused from the lethargy in which they have reposed. Already have we received information from several societies formed in different counties, and we hear propositions for many more. Let them diligently collect the agricultural facts which are continually evolved in every neighborhood, and report them to us, under the sanction of the society. We offer ourselves as their willing, ready, and zealous organ. Our subscription list, owing probably more to the low price of the publication than its intrinsic merit, is swelling most rapidly, and we shall soon afford a vehicle for the most extensive dissemination. Facts gathered in this manner and reported by a society are doubly valuable, inasmuch as they are given under the imposing authority of the collected wisdom of a county, free from the bias and prejudice that frequently distort the observations of individuals. Hearty, zealous and united co-operation is only wanting to render the *art* of husbandry in Virginia proportional to the blessings of *nature*.

We beg that every society in the State of Virginia, that is either already in existence or may hereafter arise, will communicate the fact to us by ordering a copy of our paper, which we hereby respectfully tender them.

BERKSHIRE PIGS.

We lately paid a visit to our friend, General Richardson, at his farm in this vicinity. Amongst other things calculated to delight the eye of a farmer, we were particularly struck with a Berkshire sow, eleven months old, that the General obtained from Mr. Lossing, of New York. In point of fineness of bone and height of finish, we have never seen her superior. She is now stinted to a very fine boar of the pure breed from a different family, and is expected to pig about the first of September. The demands made on us for Berkshire pigs from our country friends are innumerable. This is the earliest opportunity, and certainly not the worst we know, of

obtaining a supply in this neighborhood. We would advise those in want to drop the General a line in time. He will supply them at the usual price of $20 a pair. If they employ our services in the selection, &c. we shall charge 10 per cent. on that amount. Boxing, feed, &c. will as usual be something extra.

The public spirited proprietor of this stock selected one of his finest pigs and placed it at our disposal, with a request that we would bestow it upon some industrious deserving young farmer who desired to improve his stock. We presented the pig to Mr. E. T. Melton, of Hanover, and expect, from his management, to see him carry off the palm at the fair next spring.

THE NORTHERN LIGHT.

This is the title of a publication lately commenced in the city of Albany, under the auspices of an association of gentlemen of high reputation and acknowledged ability. In the number that we have received, the matter is excellent, and the style of execution creditable. The design is worthy of the source from which it emanates. The object is to afford a monthly epitome of general information on the lowest terms, viz. one dollar per annum. It is devoted to political economy, agriculture, literary and scientific miscellany, and general intelligence.

We heartily commend the *Northern* Light to *Southern* patronage.

ASPARAGUS.

The following, from Hovey's Magazine of Horticulture, proposes a new, and we think reasonable, method of treating this favorite and profitable vegetable. We had been under the impression, however, probably an erroneous one, that the bud lost its delicacy of flavor by being too long exposed to the atmosphere. This point can be settled at once, and if the author of the new mode is right we shall be happy to have his statement corroborated.

"In all the books of gardening which I have seen, the direction for gathering asparagus has always been to cut it several inches below the surface of the ground, as soon as the stalk has advanced a few inches above it. The asparagus generally brought to market is cut in this way, the upper half being green and tender when cooked, the lower half white, tough, and uneatable. The experience of many years has taught me that it is far better to let the asparagus grow to the height of ten inches, or a foot, and then to gather it by breaking with the fingers, as low down as it is tender and breaks easily, which, when the weather has been warm, is generally from six to ten inches. Asparagus, thus gathered, will be found to be much finer, the *whole* being tender and eatable, the produce much greater, and the process attended with no disadvantage whatever. Asparagus even two feet high, will be found fit to gather in this manner, if at any time it has outgrown the consumption, or escaped attention, which indeed was the occasion on which this new method of gathering occurred to me. I have since always practised it. Let those who are fond of asparagus give it but one trial, and they will never again resort to the old system."

POUDRETTE AND URATE.

In a very interesting communication to the Southern Agriculturalists, from the pen of "A Southerner," the celebrated establishment of Montfaucon is described as follows:

"A little beyond one of the barriers of the city of Paris, has existed for many years, one of the most singular establishments ever instituted by human industry. This place, called Montfaucon, is designed as a receptacle for all dead and disabled horses, cattle, dogs, cats, and other animals, from the various quarters of Paris; and here, revelling in filth, and debased to the lowest state of human degradation, man may be seen engaged in all the intermediate grades of the most disgusting employments, between the traffic in the stinking carcasses of putrid animal's flesh and offal, and the rearing of maggots, either to serve as bate for fishermen, or to fatten poultry for the tables of the luxurious citizens of the refined metropolis of France. To the same place is also conveyed all the *night-soil* and *urine* from the privies of the city, which are submitted to a series of processes, by which they are converted into a dry, almost inodorous powder, called *poudrette*, which being in great demand amongst agriculturalists, is transported to all parts of the kingdom, and even to the West India Colonies, thus proving an immense source of revenue to those who furnish it, and of profit to those who purchase it for the purpose of enriching their lands."

Many improvements have been made of late years which have resulted in the discovery that by the use of poudered lime, plaster of paris, and vegetable charcoal, these offensive substances are *immediately* rendered inodorous and very quickly prepared for use: and it is likely, that no discovery of modern times is calculated to produce a greater effect upon agriculture than this ready conversion of disgusting offal into an inoffensive, concentrated fertilizer.

The means of conversion are so cheap and simple, that we consider it calculated to furnish very lucrative employment to individuals in the neighborhood of much smaller cities than Richmond. But whatever the result may be, we hardly think the process inviting enough to engage the farmer to manufacture for himself; we will not, therefore, trouble him with the particulars of the modus operandi. But we will urge him most strenuously to purchase this article which is very highly lauded, and give it a fair trial. The great desideratum is to find the cheapest fertilizer—let us then fairly examine the claims of poudrette to this title. Urate, procured by a similar process from urine, is said to be even more concentrated and powerful than poudrette. Our readers are probably aware that one or

two companies are already engaged in the manufacture of these articles in the United States, and we had hoped to have obtained a barrel from one of them for trial before this. As soon as it is procured, further particulars of its operation will be given to the public.

MISCELLANY.

EAR-ACHE.

A member of the Virginia Senate informed us, last winter, that an infallible remedy for this painful complaint was to be found in the application of rattlesnake oil. Out of a great number of cases, he declared that he had never known an application of cotton dipped in the oil fail to give immediate and permanent relief.

Upon mentioning the circumstance to a physician of this city, he informed us that he had been long satisfied of the virtue of the oil in cases of rheumatism, and knowing the source from whence the above was derived, he entertained no doubt of its efficacy in the somewhat similar case of ear-ache.

We understand that the oil is prepared and saved every year in the mountains of Virginia, and if it possesses half the qualities attributed to it there, our readers in the *snake* country may convert it into an article of profitable traffic by supplying the wants of the less favored inhabitants of the low country.

The following, from a Boston paper, is a good hit at the mania, which pervades the country, for doing every thing by means of societies and committees:

"It is proposed that every man should constitute himself into a self-examining committee to inquire into his own conduct. It is believed that the business each committee would have to transact would keep it constantly and usefully employed."

Mr. Biddle in his agricultural address in October last wittily and truly remarked, that, "the farmer's richest mine is the barn yard, and that whatever temptations stocks or shares may offer, the best investment for a farmer is *live stock* and *plough shares*."

From Mr. Allen's address we extract the following happy sentiment:

"The end and aim of all the efforts of man is happiness; and happiness is certainly more connected with the good cultivation of the earth than any other occupation. Man, as he came from the hands of his Maker, was placed in a garden adorned with every fruit and flower, because these, above all created things, were the elements of that pleasure most agreeable to a pure mind. And now, where are the retreats of happiness in this world, comparable to well arranged houses, clean yards, and well cultivated gardens? Look abroad, and wherever you see shackling fences, burry fields, ducks and geese in the springs, hogs rooting up to the doors, and cattle depredating upon corn hid in the weeds, you will find men in the grog-shops, and the children without school-houses, and their mothers in misery. On the contrary, wherever you see highly cultivated fields, a yard of green sod orchards of choice fruit, and gardens of select flowers, you will find intelligence, virtue, and happiness."

"LOOK AT HOME."

The advice given by a girl to Thales the Milesian philosopher was strong and practical. Seeing him gazing at the heavens as he walked along, and perhaps piqued by his not casting an eye on her attractions, she put a stool in his path, over which he tumbled and broke his shins. The excuse she made was, that she meant to teach him, before he indulged himself in star gazing, to "look at home."

How many of our morus multicaulis and other visionaries have lately broken their shins over a "stool," and been thereby taught to "look at home."

CRESSIN'S MAGIC.

Pliny tells us of one Cressin, who so tilled a piece of ground that his extraordinary products were attributed to magic by his ignorant and lazy neighbors. How is it, said they, "unless it be that he enchants us, that he can contrive to draw such a revenue from his inheritance, while we, with equal lands, are wretched and miserable?" When arraigned before the justice seat, Cressian was his own advocate. "Behold," said he, "these implements of husbandry, these carts, and these oxen. Go with me, moreover, to my fields, and behold how they are tilled, how manured, how weeded, how watered, and how fenced in! and when, added he, you have beheld all these things, you will have beheld all the art, the charms, the magic, which Cressin has used."

The days of sorcery are not yet over; we think we know some "magicians," some Cressins, even in Virginia, at the present day.

PRACTICE *vs.* PHILOSOPHY.

The following little circumstance, related of Sir Isaac Newton, well illustrates the mutual dependance of practice and study. The votaries of either should never despise the other. Whenever they are united, useful knowledge is the result.

The learned philosopher being very busy in his study, a little girl came to ask him for some fire. "But," says the sage, "you have nothing to take it in," and as he was going to fetch something for that purpose, the little girl stooped

down, and taking some cold ashes in one hand, she put live embers on them with the other. The astonished philosopher threw down his books, saying, "with all my learning I should never have found out that expedient."

The press of interesting agricultural matter has compelled us to abridge our miscellaneous head, much against our will. We believe it is generally considered by our subscribers not the least interesting or instructive portion of our paper.

COMPLIMENTS.

We take this occasion to thank the press generally for the very handsome and complimentary notice they have been pleased to take of the PLANTER. To parade such notices before our readers, we consider "a custom more honored in the breach than in the observance," but we hope our cotemporaries will not consider us the less grateful for the honor they have done us. For those (who are not a few) that have quoted from us without credit—we excuse them for the obligation we are under to the craft in general.

RICHMOND MONTHLY MARKETS. JUNE 8th, 1841.

TOBACCO.—Prices have been gradually tending downwards during the last month—at this time the current rates are as follows:—Lugs $4 25 a $5—common leaf $5 25 a $6 50—middling $6 75 a $7 25—good $7 50 a $8 50—fine $8 75 a $10—and very superior $11 a $15.

FLOUR.—Prices have gradually advanced for last fortnight—the supplies are now very moderate, and the stock so limited, shipping dealers find it difficult to make purchases to any extent—very few sales under $4 87½—the general asking price is $5 for fair superfine and $5 25 a $5 50 for extra.

CORN.—Very little in market—the demand is good, and at present the price is 55 a 57 cents per bushel.

Tobacco Inspections of Virginia.

	1840.	1841.
May 31st,		
Richmond passed and refused	8,802 Hhds.	9,408 Hhds.
Petersburg " " "	10,062 "	10,300 "
Lynchburg " " "	5,392 "	5,415 "
Farmville " " "	2,331 "	2,619 "
Clarksville " " "	1,441 "	2,128 "
All other places " "	575 "	750 "

The crop has been hurried in rapidly this year, and we think the entire inspections of the State, will fall short of last year 5 a 8,000 hogsheads.

BAGWELL, SMITH & JONES.

June 8, 1841.

BERKSHIRE PIGS.

In another article we informed our friends that we knew of only one litter of Berkshires that was shortly expected in this neighborhood. We are now happy to state that Mr. Alexander B. Shelton, of this city, the owner of the mother of Suke, the premium sow, and the raiser of the boar President, the most celebrated animal in this vicinity, is now ready to receive orders for his summer and fall litters, the first of which he will be prepared to deliver in about ninety days from this date. Farther notice of this very superior stock and of the spirited proprietor will be taken in our next number.

Mr. Shelton delivers his pigs caged, in the city of Richmond, at twenty dollars a pair. Our personal attention will be given to selection, &c. upon terms formerly intimated.

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THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.* | Tillage and Pasturage are the two breasts of the State. *Sully.*

C. T. BOTTS, Editor. **No. 3, Governor Street.**

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TOBACCO.

[Continued from page 84.]

GENERAL REMARKS, IN CONCLUSION.

Plaster of paris, on suitable land, acts well on tobacco, though it will not cure so fine a color if there is a great deal of plaster put on it while in the field. When there is much litter in the land a small quantity of plaster is of great service, as it gives the tobacco a healthy growth which otherwise would be sickly. Some planters sow the land with plaster before the tobacco is planted and afterwards plaster the plants, after they are transplanted. This way makes a heavy crop, but it will not cure so fine as it would have done with less plaster. I have generally found that a large spoonful is enough, if put in the bud of the plant directly after being *wed-out.*

When manuring tobacco land with manure, that is well rotted or with ashes, the best time to put it on is when the land is ready to be laid off for making the hills. The plough then throws the manure where the hill will be when made.

I have said that plant beds should be sowed in March; they may in case of accidents, be sown much later and yet bring plants in time. In the year 1826 I had most of my plants killed by a spell of freezing weather about the middle of April. About the 18th or 19th day of the same month, I burnt and sowed a bed in low land. I selected the place along the margin of a branch for the purpose of having water at hand to water the bed if necessary; for late in the spring as it was, I knew it would only be by great attention that the plants would come in time. It so turned out that little or no rain fell until near the last of June, and I regularly, every evening, watered the bed. By the middle of June the plants were large enough to plant, and if there had been a planting season, at that time, a great many plants, could have been planted for the size of the bed, out of it. I knew a bed that was sown in February, 1820; the plants come up in March; on the 2d day of April a snow storm commenced which lasted all day, snow fell to the depth of five or six inches, which was succeeded by a cold north-west wind. Nearly every plant in the bed was killed; in a few days it was dug up and sowed; as soon as the plants got up the bed was cleaned of them, by the flies; about the 8th or 10th of May the bed was dug up and sown again; by the middle of June, there was a smart drawing of plants taken from it, and by the last day of June a crop of fifteen or twenty hogsheads of tobacco planted out of it. I give these two instances to show that plants may be raised in time in case of accidents, although sowed very late in the season.

It seems superfluous to say that a planter should provide and keep on his plantation the best of agricultural implements; for every mechanic, artizan, and agriculturist should provide himself with the best of tools, for it has been remarked that none but a rich man can afford to work with an indifferent tool! Of all others a planter stands most in need of labor-saving tools and machinery. For tobacco requires a great deal of labor and attention to produce it of a fine quality; how much labor is often lost by giving a hand an indifferent axe or worn out hoe, to work with, how much more ploughing can be done, and how much better, with a plough in good order, than with one worn out. How much time is often lost in sending to a neighbor's to borrow a spade, or to grind axes for want of a grindstone at home. Half the time lost in this way in the course of a year, would if employed in some useful labor more than purchase a spade and grindstone. But it is not only to these little matters that a planter's attention should be called, as tobacco puts it out of his power to devote as much time as he would wish, to the raising of food for his family, workmen, and animals. He ought to provide such machines and utensils as will enable him to prepare his food for his animals to the best advantage.

I must again say that it should be the greatest object with a planter, to have his tobacco crop grow quickly after it is planted; tobacco that grows slowly is apt to become diseased (for tobacco, like other vegetables, is subject to disease) and will not cure of a fine color. To make fine tobacco requires great attention to what would seem to be small things. For instance, the setting of a tobacco plant in the hill may retard its growth considerably. Put the main root in the ground doubled like a staple, if it live at all, it will have to grow an entire new root before the leaf grows any. Or set a plant too deep in the ground if it does not rot and die, it will be a long time before it goes to growing; when a crop of tobacco is ready for the house early, there is more time to take care of it; there is no

danger of its being spoiled by being caught in frost—the plants will be entirely cured before very freezing weather commences—consequently, there will be none to freeze in the house. A forward crop likewise can be stripped early, and of course the sooner got ready for market.

As I am about to close, I must say, there is nothing recommended in my essay that is far-fetched; to an experienced planter, the most of it will appear common place, but to young planters it will give many a useful hint.

Young men when commencing any business stand in need of the experience of those who have been engaged in the same kind of business before them.

HAY.

To the Editor of the Southern Planter:

My Dear Sir,—An accident which happened to my uncle, and which has confined me to my bed for several days, has prevented my compliance hitherto with my promise to furnish your readers with my mode of curing clover hay. Indeed I am afraid now that I shall execute my task but lamely, as I am at this moment suffering much pain, and nothing but a desire to furnish you this article in season would induce me to undertake it at this time.

I commence cutting my clover hay when it is fully in blossom, before the stems become dry and hard, taking care to choose an opportunity when the indications are favorable for a dry spell and an unclouded sky; indeed I never permit even the dew to fall upon it after it is cut.

As the season when this operation is performed is a very busy one with the farmers, it is my object to despatch it as quickly as possible. I, therefore, begin to mow very early in the morning, and as soon as the dew disappears from the top of the mown grass, it is opened and nicely spread, that it may be exposed to the sun and air. About 11 o'clock, the scythes are stopped, and all hands engaged, especially if the clover is rank, in turning it over, so that the other portions may in their turn enjoy the benefit of the sun and air.

As soon as it appears to be killed or withered by the sun before the leaf becomes so dry as to break and shatter, I lay it in windrows of eighteen inches or two feet in height, by the use of hand rakes. I take care to rake clean as I go, and to lay up the windrows lightly, that the sun and air may continue the proceess of drying somewhat further. When this process is thorough, the leaf begins to shatter with dryness if handled, I therefore wait until the dew of the evening has softened the leaf, when I put it up into shocks of about an hundred weight each, shaping them so as to ward off the rain, if it should fall, or secure it from the dew. The following morning, as soon as the dew begins to disappear from the tops of the shocks, I turn them over, seeing that they fall apart so that the air may dry out any moisture that may be found in the parts nearest the ground. When this is effected, and before the leaf gets so dry as to subject it to shattering, I convey it to my barn, to be deposited in bulk during the cool of the morning.

I sometimes salt it, which will ensure its preservation in a much greener state even than this process leaves it. To effect this object, I put in layers of about one foot thick, taking care to lay it light, without trampling, and upon each layer sprinkle a little of any kind of salt I can most easily obtain; one peck and a half to a thousand weight of hay will be sufficient. It adds much to the preservation and quality of the hay.

In place of the salt, I sometimes spread over the layer of hay a thin layer of any kind of bright old straw, say three inches thick. It serves to absorb the moisture and prevent the heating of the bulk, whilst the absorption imparts a flavor and nutriment to the straw, which renders it not inferior to the hay itself.

When I have neither salt nor straw, I am more particular in turning over and exposing my shocks the day after cutting, watching them carefully to see that enough of the sap is expelled from the stem to secure its preservation in bulk. This is a matter of care and judgment, as the process should not be carried a step farther than is necessary for this purpose. With the sap and juices the nutriment is evaporated, and hence the value of the salt and straw which preserve the hay with a greater quantity of sap.

When I open my hay for winter use, the blossom, leaf, and stalk are perfectly bright, and form a delightful nosegay. I have been often asked how I managed to keep my work horses in such excellent order. The use of this delicious hay is the answer to the inquiry. My horses in addition to it, even when doing the hardest work, never get a gallon of grain a day.

I believe few farmers are yet aware of the difference between fermented and rotten hay on the one hand, or dried up sapless stems on the other, and judiciously managed juicy, sweet, flavored clover hay.

Yours, JOSEPH BERNARD.

June 8, 1841.

We regret very much that the above was not received in time, as it was intended for the June number. We are afraid it is too late for some who might have profited by it during the present season.

For the Southern Planter.

CORN COBS.

Mr. Editor,—I am happy to see you and your correspondents pressing the value of the corn cob upon our wasteful and extravagant

community. If farmers would only attend a little more to this and some other points of rural economy, they might easily save enough to justify a system of improvement which they admit to be desirable, but from which they are frequently deterred by the want of funds. I am fully satisfied that there are but few farmers in our community who do not waste more than enough to supply them with the means of effecting improvements, that in their turn would double their means of making others equally as profitable.

Go upon a large farm in Virginia, observe the niggardliness in providing fences, houses, and fixtures, and the correspondent waste in food, labor, and destruction of implements. Compare the management with that of a manufacturing or mercantile establishment, and you see at once why agriculture is not profitable. Such system, or rather such a want of it, would break down any other business in the world.

But I have been drawn off from the main object of this communication, which was simply to confirm the value of corn cobs, by relating to you a circumstance that came within my own knowledge. In the winter of 1816 corn was very high, and Peter Bedlock, of Dinwiddie, who is now an independent farmer, was a very poor man, but an excellent manager. Afraid that his corn would not last, he determined to try, and did, winter his horses upon corn cobs alone, pounded in a common hominy mortar with his own hands. They received no other sustenance except long forage, as hay and fodder. Upon this they did their winter's work, and no man ever saw Peter Bedlock drive a poor horse.

To this fact I am ready to testify and you are welcome to give my name to any person who may feel sufficiently interested in it to ask for it.

Yours, J. H.

For the Southern Planter.

MANURE.

C. T. Botts:

Sir,—I am most happy to witness your strenuous endeavors to improve the agriculture of our native State. No exertion has been wanting on my part, I assure you, to sustain your enterprise. I have not been satisfied with saying, that every farmer in Virginia ought to take your paper, but I have made it my business to bring it to the notice of my neighbors, conceiving that in so doing I was benefitting them and myself not less than the Editor. The fruits of those exertions you have enclosed in a ten dollar note, for which you will please direct your paper to the following names. . . . . .

Nor is this all. From the columns of your little work, I am satisfied that I have reaped ten times the amount of my subscription already in a single article. I am, therefore, still your debtor, and to repay the obligation, in a measure, I have concluded to give you my mode of managing manure; a point upon which you very properly lay great stress, and one upon which any opinion derived from experience may be valuable. For the last ten years I have paid great attention to this subject, and have tried every plausible method recommended in the agricultural periodicals of the day. The result of those experiments has satisfied me that the difference between one mode and another is much greater than would be imagined, and that the greatest secret of good farming consists in discovering the best mode of preserving the valuable properties of manure.

The portions of dung which afford nutriment to plants are volatile and soluble. They are evaporated by heat and dissolved by rain. Dung is exposed to the pernicious effects of heat, either in a pile or when scattered, to the influence of the summer sun and atmosphere. How then is it to be preserved? By applying it to a growing crop as soon as made. I have heard a great deal of the necessity of fermentation, and the injury done by fresh manure: that manure has a tendency to generate heat is certain, and that if applied fresh, in too great quantities, it may produce too much heat for the healthy growth of plants is certain; and it is certain also that you may subject it by time and exposure to a process by which it will be robbed of those properties, when you may apply it in any quantity with impunity, but with comparatively little benefit too. What would be thought of an invalid who would go to an apothecary and say, "Sir, I want some calomel that you have had in the house for many years, of which I can take a large quantity without danger," and what would be thought of the apothecary who would reply, "Sir, this, having lost its virtues and become comparatively innoxious, is much more valuable than the fresher article, and I must charge you a greater price per ounce for it?" It would be just as reasonable, as to assert that old manure is in any case better than fresh.

Satisfied of these facts, I pursue the natural and simple plan of making it the business of a particular boy, every morning, to collect carefully the deposits from my stalls, stable yard, hog pen, &c. and spread it thinly upon some one of my growing crops. If the crop is not out of the ground, and consequently the leaf not so expanded as to seize the gasses given out in the process of evaporation, I have the manure slightly covered with earth. Of course, if the ground is too wet to be trampled, I wait until it is dry enough for the purpose.

Now this may seem to some, who have been used to heaping manure, and making compost, a very theoretical mode of procedure. But let them try it, and they will find it highly practical—they will find, that they will obtain more than double the nutriment from the same quan-

tity of dung, and they will also find that they are relieved from a great quantity of extra labor. Farmers are advised to accumulate large banks of dung, mixed with mud, weeds, &c. For what purpose? That they may have on their hands the labor of scattering it again at the very busiest season of the year? Instead of accumulating the labor and running the risk of constant waste, let them scrupulously collect every thing they can find in the shape of manure and apply it as soon as made.

By this simple method they are relieved from the necessity and expense of a stercorary, the filth of a manure pile, and the uneasiness arising from the anticipated labor of putting out their manure. They certainly get all the benefit to be derived from their manure, and it would be hard for any other process to accomplish more.

The plan I recommend is so novel and so opposite to preconceived opinions, that I am deterred from putting my name to this article, for fear of the ridicule it will excite. I hope, however, that some one with more resolution will give it a fair trial, and report what I know he will find to be, the beneficial result. With the most ardent wishes for the success of your periodical, which deserves the support of every farmer in Virginia at least, I remain

Yours, A FARMER.

For the Southern Planter.

CORN SHUCKS.

Sir,—I see that you recommend the cob of the corn as a food for cattle. There is another part of the corn that I have long thought was too much neglected. I mean the shuck. Ten years ago I was in the habit of throwing my shucks in the farm pen for litter. I now make a much better use of them. I pass them all through the cutting-knife, and feed them not only to my cattle but also to my horses. After the most satisfactory trial, I am fully convinced that they are the strongest part of the corn, next to the grain. My method is this. My shucks are cut up in the morning, and thrown into a half hogshead of water strongly impregnated with salt. In the evening, they are taken up in an open split basket, in which they are held suspended over the hogshead for a few moments, until the water is drained off; the moistened shucks are then mixed with corn meal and bran, and fed, as I said before, as well to my horses as my cattle. The morning meal is treated in the same way, beginning the preceding evening.

I have made careful experiments to asceriain the fact, and although a horse may refuse the shucks at first, I am fully satisfied that they make the very best cut food that was ever given to any animal. Give me a plenty of shucks, and I want no cut hay, fodder, or straw. Many people who acknowledge their value for cattle and mules, are of opinion that they do not answer so well for horses. This is a great mistake I assure you, and arises from the fact that a horse, fed upon more dainty food, will turn up his nose at first at the smell of a shuck; just as a pampered fine gentleman would perhaps reject a solid dish of bacon and greens when it was first set before him. But give him nothing else, and his appetite will soon come to him, and he will find by experience that there is no other food upon which he can do his work so well. In a week, he will prefer it to any thing you can give him, and so will you.

Yours, ECONOMY.

For the Southern Planter.

C. T. BOTTS:

Sir,—I see that in answer to an inquiry of some correspondent, you give in your last number various modes of extracting stumps. Prevention is better than cure, and the best plan I have ever seen practised to get rid of the difficulty, is to have no stumps at all. I know some settlers in the western country, who never cut down a tree—they dig them up. It is much easier to do this than to dig up the stump. The very leverage, that you are so ingeniously devising to obtain by artificial means, is afforded by nature in the height of the tree. It is only necessary to fasten a strong rope to the upper limbs and go to work digging and cutting the roots upon the side opposite to that on which the rope is used, which will of course always be applied with regard to the lean of the tree.

This method saves a great deal of time, and a great deal of valuable timber—for all timber getters know, that frequently the most valuable part of the tree is left in the stump. The plan is not new; why then, if it has all these advantages is it not universally pursued? Simply because we are the most headlong and impatient people upon the face of the earth. A field can be gotten into cultivation sooner by cutting down than digging up the trees. That is sufficient for an American. Go ahead is his motto, and without regard to future consequences, he pursues the mode that gives him the quickest return. Nor am I prepared to say that there may not be many circumstances which justify such a course. Old father time is a cheap workman, and it is well enough to force the old destroyer to minister to the productions of the earth against his nature and his will. But I say to cut down a tree, and dig up the stump, is an egregious waste of labor, and that no artificial stump extractor is equal to the natural means here detailed.

A TIMBER GETTER.

For the Southern Planter.

Mr. Editor,—Finding a leisure hour upon my hands, with my scrap book before me, I have

determined to make an extract from it, on the subject of *curious plants*, that may serve to fill, at your convenience, some unappropriated column in the Planter. A NATURALIST.

CURIOUS PLANTS.

Hedysarum Gyrans.—This plant is a native of Bengal, near the Ganges. This is a wonderful plant, Linnæus observes, on account of its voluntary motion, which is not occasioned by any touch, irritation, or movement in the air, but no sooner do the plants acquire their ternate leaves than they set in motion, this way and that, which motion does not cease during the whole course of their vegetation, unless they are exposed to too much wind or rain, when they become quiet, and then no art we possess is capable of exciting them to action.

Dictamnus.—This plant is a native of Germany, and is remarkable for the fine scent it affords. The pedicles of its flowers are covered with glands of a rusty red color, from which exudes a viscid juice, which exhales in vapor, and upon the application of fire in a dark place it will be seen to burn.

Tropæolum.—This plant belongs originally to Peru. In the evening, it is said, its flowers emit spontaneously at certain intervals, visible sparks like those of an electric machine. This was first observed by the daughter of Linnæus.

Lagetto.—This tree grows in Jamaica, and a *natural lace* of fine quality is found ready manufactured in its bark. This lace is so handsome that ruffles, a frill, and cravat, made of it, were once sent as a present to king Charles II.

Yucca.—An American plant sometimes called *The Needle and Thread Plant*, for by soaking in water, the fibres of the leaves may be separated from the pulp, without being torn from the hard, sharp point, so that when properly prepared, the leaves do really become needles, ready provided with a skein of thread.

Dionœa Muscipula.—This is an inhabitant of the marshes of South Carolina. This plant is endowed with so much irritability, that an insect which settles on it is generally crushed to death by the collapsing of the two sides of the leaf, which is armed with bristles. The *Droseva* or English Sun-Dew, is possessed of similar irritability.

Nepenthes Distillatoria.—This is a Chinese plant, sometimes known as the Pitcher-plant, in consequence of its leaves, which assume the shape of pitchers covered with lids, and are generally found filled with water, each one to the extent of half a pint, which both men and monkeys make use of to assuage their thirst.

Tillandria Utriculata.—This plant growing in South America and the West Indies, is also a reservoir of water, the traveller, Dampier, speaking of this plant, says, "We stick our knives into the leaves just above the root and thus let out the water, which we catch in our hats, as I have done many times to my great relief.

Palo de Vacca, or Cow Tree of South America, yields a copious supply of a rich and wholesome milk, which is obtained by piercing the trunk. At sunrise this milk flows most abundantly, and Humboldt informs us, that at this time the natives are to be seen hastening from all quarters, furnished with large bowls to receive the milk.

Artocarpus, or Bread Fruit Tree, grows in the South Sea Islands to the size of a moderate sized oak. The fruit of this tree is about the size and shape of a child's head; it is as white as snow and somewhat of the consistence of new bread. It must be roasted before it is eaten, after which it becomes very palatable.

DR. ARCHER'S ADDRESS.

We have received from a committee of the Agricultural Society of Elizabeth City a copy of the inaugural address of their President, Dr. Archer. It is with great difficulty we resist the temptation to publish this most excellent address entire. But the course which we have marked out for ourselves and the plan of condensation which we are determined most rigidly to pursue, forbid our doing more than giving a brief sketch and a few extracts from that, which we heartily wish every man in lower Virginia, at least, could enjoy the pleasure of perusing throughout.

The Doctor begins by ably arguing the value of agricultural associations and laughing to scorn the ignorant prejudices, which sometimes prevent their formation.

"The attempts which are every where being made to get up agricultural societies, he says, is only the embodying of the spirit of improvement which is abroad. This spirit, when once aroused, cannot easily be laid; it is this spirit, which prompted our ancestors, more than two centuries ago, to abandon the comforts of home, and in a frail bark to traverse an unknown ocean and erect their altars at our Jamestown. It is this spirit, which prompts the young man to shoulder his axe, and bidding adieu to his paternal fireside and the graves of his relatives, to cut his way through the western forests to distinction and wealth. It is this spirit which an all-wise Providence has implanted in the breast of every human being, and without which the world would long since have returned to its original chaos.

"I have no hesitation in saying that agricultural societies, and periodical works on agriculture, have advanced the science in our country more within the last fifteen years than it had been advanced by every other means within the previous fifty. Their influence is not confined to one locality, but disseminated, broad cast, throughout the land."

Upon the subject of emigration he remarks:

"Our farmers have at last discovered the golden secret, that it is easier to improve a field, naturally fertile, but exhausted by bad cultivation, than to open a new one; and this single discovery, which I ascribe to the new lights that have been thrown upon the subject of agriculture, will tend more to arrest the tide of emigration than any one circumstance that could possibly have happened.

"It has been my fortune within the last few years to have visited a large district of our extensive country, from its southern limits on the Gulf of Mexico to the northern lakes—from the Atlantic to what a few years since was called the far west. I visited it with the eye of an agriculturist, and I declare to you most solemnly, that in lower Virginia we are blessed with a region incomparably superior, taking into consideration the reciprocal advantages and disadvantages, to any I have ever seen. You know not the happy lot with which a beneficent Providence has endowed you—you know not the value of the talent which has been committed to your care. We occupy the favored spot between the regions of seven months of continued ice, and seven months of parching heat; we enjoy, with few exceptions, the vegetable productions of each extreme. In point of health we have greatly the advantage over our southern, and will yield but to a certain extent, to our northern friends."

The Doctor then goes on to state that during the last summer he visited the valley of Virginia for the purpose of locating himself for life, fully impressed with the idea that he could do so there more advantageously than any where else in the Union. But, however much his eye might have been delighted with golden harvests, lowing herds, and substantial fences, his reason was satisfied, that upon a fair allowance for difficulties of cultivation and expense of finding a market, the light lands of the tide water of Virginia afford the greatest clear profit.

Happy in the result of his labors, the Doctor, in his pursuit of happiness, seems to have attained contentment, at least? He is not singular in the opinion that lower Virginia might be made the garden spot of America—that it is not so, he ascribes to the luxury and sloth that our favored clime engenders.

We particularly commend to our readers the Doctor's views upon the subject of education. Hear him:

"Intimately connected with the subject of agriculture is the subject of education. There never was a greater mistake upon the face of the earth, than that a good education was unnecessary for a farmer. Gentlemen, there is no knowledge or information of any kind that will not at one time or other avail him in his agricultural pursuits. If he is a lawyer, he will understand his own rights, guaranteed to him by law, and be the more ready to respect the rights of others. Is he a physician? He can alleviate the sufferings of his own household, and act the good Samaritan to his neighbor. Is he a chemist? He can analyze his soil and detect wherein it is deficient in those qualities which would render it productive. Is he a mathematician? He wants no surveyor to mark his bounds or measure his fields. In short, there is no knowledge from the calculating an eclipse to the making of a horse shoe nail, that may not, at one time of other, be turned to the farmer's profit.

"How absurd then, how ungenerous is it for a father to say, 'this son is to be the doctor, and he must go to college, that is to be the farmer, and the old field school is good enough for him.' I tell that parent he makes an odious and unjust discrimination between his children, and one, for which his neglected son will have but little cause to honor his memory.

"In this country, where the highest honors in the State are open to the humblest individual, the want of that education which the ignorant father refused to his son might be the only barrier to his highest preferment. Look at the honorable instance in the cabinet of our present chief magistrate. The poor farmer boy, who toiled from sun to sun till he reached the age of manhood to provide means to go to school; would that lad have ever been a Senator or a Secretary of the Treasury, but for the education he snatched by piecemeal from the fruits of his own labor? No, my friends, he would have lived and died, as thousands and thousands of young men live and die, every day, unhonored and unknown.

"Again, were the great mass of farmers well educated, not only agriculture, but every interest in the State, would be incalculably benefitted; for, our councils, instead of being occupied by lawyers, and metaphysicians, and stump orators, talking themselves into notice for political preferment, too lazy to dig and too proud to beg, would be filled with plain, honest citizens of practical common sense; men, who would labor for the benefit of the State, and not for themselves; who would show that the great agricultural interest, the support of every other in the land, and embracing nine-tenths of our people, has been shamefully neglected, and needs looking to, unless we are prepared to see the 'old Dominion,' 'the mother of States,' that once occupied the topmost round of the ladder, descend, step by step, until she becomes an object for the finger of scorn to point at."

"Gentlemen, a great outcry has been raised against *book* farming. I confess I do not understand the meaning of the term, unless it be that book farmers are those who can read, in contradistinction to those who can't read. Let me ask, whence did our wiseacres, that enlightened class who can't read, obtain their valuable information? Was it the fruit of their own prolific

brain, or did they derive it from others? It could hardly be the first; for if they had the capacity, life is too short to have enabled them to originate or discover all they know. It must then have been derived from others, and I should like to know, again, if information, derived from others, is less valuable because those others have embodied their experience in a book?

"Few farmers have much opportunity for travel or observation beyond their own immediate neighborhood; now, the man, who reads, or if you choose to call him so, the book farmer, may stay at home and enjoy all the knowledge, derived not only from his own experience, but that of all the world besides. He puts in requisition the labors of thousands, each one of whom was perhaps superior to himself in intelligence; he thus lives, in a measure, the lives of a thousand men, with this advantage, that, constituted as the human mind is, no one man, had he lived from the creation of the world until the present day, could have concentrated in his own person all the information, that may be published through the investigations of the thousand in an ordinary lifetime."

If we have devoted to this address much more space than it is our custom to yield to any one article, we must point to the excellence of the matter as our excuse. If agricultural societies only met to listen to the words of truth and wisdom from the lips of learning and experience, the trouble of forming and sustaining them would be infinitely more than repaid.

For the Southern Planter.

BERKSHIRE HOGS.

Mr. Editor,—It is amusing, soberly and aside, to watch the fatuity and folly which mark the mass, when lead away by a popular current. Are you, sir, aware what a Berkshire hog is? and that a Berkshire is in truth no longer a Berkshire. Berkshire is the name appropriated to a stock, which, by judicious selection, has attained great perfection, derived from the name of the county in England which afforded the hog that was used as the substratum of the breed. But the present stock, which is so deservedly in high repute, was obtained by judicious selection. Mark that. Can it be continued by any other means? No, sir, it has been already lost in America, or greatly deteriorated, by indiscriminate breeding. To continue and perfect the stock, not more than one individual in fifty should be kept as a breeder. Who kills forty-nine out of fifty of his Berkshire pigs, when they are selling readily at twenty dollars a pair? None but a fool, of course. But who pays twenty dollars a pair for the forty-nine out of fifty of these pigs that any judicious breeder would exclude from the breeding stud? None but a fool of course.

Berkshires are a production of art, not of nature, and, unless the same art is used to preserve them that was exercised to produce them, they will retrograde much faster than they advanced. The breeder's rule, upon which all his operations are founded, is, that like begets like—he, therefore, carefully examines every litter; and where he finds a remarkably fine individual, he sets him or her aside to breed from. This, together with judicious crossing is the origin of every improved breed; but no stock of hogs, or cattle, or any thing else, has yet been brought to such perfection that all the individuals produced are good and worthy of being made breeders.

Why then, it may be asked, cannot any individual take the native stock of a country and go on to improve it for himself by judicious selection? So he may—but he will find it much cheaper to purchase a hog, who, by the care of others, has already been advanced to a certain state to begin his crossing with than to wait for the advancement to that point of his unimproved stock. No stock, in my opinion, affords finer individuals for this purpose than the Berkshire. But I can pick out many individuals from this, or any other stock, totally unsuited for the purpose of improving any breed. What is the Berkshire valuable for? Simply because it contains a greater number of individuals than usual of that peculiarity of anatomy valued by the judicious raiser of hogs. But suppose an individual, as there must always be thousands, does not possess that peculiar anatomy, does it avail him, or you, who are his owner, that his mother, or brother, or third cousin does? It is true, that if two individuals possess equal points themselves, he will be preferred whose kindred, or *blood*, is most celebrated; and this, because animals not only breed after themselves, but sometimes, also, after their progenitors. But always give preference to propinquity of good points; that is, prefer to have them in the immediate to the remote progenitor. Yet, regardless of this simple truth, we daily see our people sending their money from home, purchasing any thing, no matter how indifferent in form, provided it may have been the offspring of a Berkshire sow. Now I would rather pay fifty dollars for a good selection, than ten for a pair taken at hap hazard.

I have no pigs for sale, and am actuated, I assure you, by no selfish motives in these considerations—indeed, from their very nature it must be evident that I can have no interest in effecting indiscriminate sales. But I have seen a great many Berkshire hogs, and I have long been a breeder of various kinds of cattle, and whilst I am satisfied that there is no other stock from which so many good individuals proceed as from the Berkshires, I know, also, that I daily see specimens, both raised here and brought into our ports, sold at the usual price, that are not half equal to specimens that could be selected even from our native stock. If the breeders of these hogs, of whom I believe there are several

very judicious in this vicinity, really desire to benefit our native stock, and at the same time receive a fair reward for their skill, enterprise, and judgment, let them make shoats or pork of all their inferior animals, and keeping the extraordinary ones as breeders, hold them at a price that will be sufficient to effect their ends. This is the only way the breed of hogs can be improved by the use of Berkshires in the opinion of A BREEDER.

RUST IN WHEAT.

Several very interesting and scientfiic papers have lately appeared in the Farmers' Cabinet, on the subject of Rust or Mildew in Wheat. One is signed AGRICOLA, and is very highly commended in the Medical Examiner, a journal of established reputation, as the production of a scientific gentleman, who has devoted great attention to the study of agriculture. The other is over the signature of KENDERTON SMITH, and purports to be the result of continued and repeated observation on the subject. Both gentlemen exhibit a great deal of ingenuity, and deserve the thanks of the community for the attention they have bestowed upon this important subject. Whilst their views upon many points are reconcileable, there is a very material one upon which they are directly at issue. They both concur in the established doctrine that an extraordinary increased action occurs in vegetation at the time of perfecting the seed. It is during this critical period of a few days that they imagine blight or rust is caused by circumstances occurring to impede this necessary and violent action of nature. AGRICOLA conceives that a cool and clear atmosphere is required, whereby the exuberant moisture of the plant may be evaporated as fast as it is generated, and attributes RUST to the presence of damp and heat in the air, whereby the vegetable heat and moisture, generated in the plant, are pent up and their healthy action stifled. Cool, dry weather during the period employed in filling the seed he conceives to be necessary to the perfection of the grain. That contiguous fields of wheat ripen at different periods, even within a few days of each other, he thinks sufficient to account for the fact that they are not equally subject to rust.

Common opinion sustains the theory of Agricola, that a *damp* atmosphere at the time of ripening is productive of imperfection in the grain, and occasions blight or rust. Whether heat is also injurious is another question. Upon this point, Mr. Smith differs with his learned antagonist. He presumes that nature calls all her powers into requisition in the hasty process of ripening, and that one of the most powerful of those agents is HEAT. Consequently, he deprecates the practice of sowing grass or clover with wheat, which, by shading the ground keeps the roots and stalk moist and cool so as to counteract the important action of heat, when it is so much needed. He asserts that his opinion of this injurious effect has been verified by long observation, made by himself, and the repeated experience of others. In England, where the wheat is generally drilled and carefully weeded, he asserts that rust is almost unknown, and he cites many particular instances in proof of his opinion. He infers that although moisture and *coolness* may produce rust, even in clean fields of wheat, without extraordinary heat at the moment of ripening, it is impossible for wheat smothered with grass to be free from rust.

Various other articles have since appeared, of more or less ability, sustaining the one or the other champion. Amongst these, the most distinguished perhaps is a Mr. Gowen, of Germantown who totally rejects the opinion that blight or mildew is ever caused by sowing grass or clover with wheat. On the contrary, he thinks the theory of Col. Smith, who it seems ranks high as a practical farmer, calculated to do much injury by checking the practice of this valuable mode of sowing clover. He argues that if the grass or clover is injurious, so ought also thick wheat to be, which is not pretended. But most of all, he asserts, that a long and careful observation has furnished him with facts that refute the truth of this theory. Again, he asserts that the remedy is worse than the evil, and that it is better to run the risk of blight than to be at the trouble and expense of a separate seeding of grass or clover. He considers blight to be the effect of a sudden change from heat to cold, which frequently occurs at the critical moment of ripening, whereby the neck and head of the wheat are chilled and unable to elaborate the sap sent up by the less exposed parts below: hence, the bursting of the overcharged vessels and the appearance of *rust* upon the stalk, which is but the outward sign of disease that preys upon the vitals within. The sun returns again upon the drooping, moistened plant, and with his scorching rays scalds and burns the sickly head until the grain is blasted and vitality destroyed. The only preventives he imagines to be early sowing, clean seed, and early cutting.

We have given these different views somewhat at large, because the subject is an important one and the source from which they come entitles them to great consideration. It is especially important to ascertain whether the opinion of Col. Smith, that the practice, which obtains so universally here, of sowing clover on wheat is the cause of blight. The only plan is to test a theory which is plausible by *facts*. Many writers have come to his support with statements of facts, that would seem to corroborate his opinion. Will our wheat growers furnish us with their opinions upon this important point? If they can establish Col. Smith's error, they may do

much for the people of Pennsylvania at least, where his opinions seem to be gaining a strong foothold. The *advantages* of seeding clover on wheat are certain—the *injury* is doubtful, at least.

For the Southern Planter.

HAY.

You very properly, Mr. Editor, reprove us in this part of the country for permitting a bundle of northern hay to enter the Richmond market. We have, I believe, some as fine grass lands as can be found in the world, and certainly there is no crop that pays better than hay. I do not believe, however, that our climate or soil is as well adapted to the red top, or herds grass, as the north, and I am induced to think that we have permitted them to render this grass, probably suited to their circumstances, fashionable amongst us beyond its deserts. The crop cut is not so heavy as timothy, nor is the hay near so nutritious. There is very little of our land upon which the herds grass will not, after affording two or three light crops, yield entirely to the broomstraw and sorrel.

I have been living for some years in the vicinity of the Chickahominy, though not upon it, and have wondered very much at what appeared to me the folly of the owners of land upon this stream, in forcing upon the soil this herds grass, to which it seems to have so great a repugnance. Although I believe you were once the owner of a tract of land, yourself, upon this stream, you are probably not as well acquainted with its peculiarities as I am, who have known it from my boyhood. I have seen a great deal of bottom land in different parts of this country, but notwithstanding that some portions of it are thin and sandy, I have never seen a stream of its size that afforded such extensive alluvial flats. Here are thousands of acres of the very richest bottoms, as indicated by the quantity and quality of the growth upon them, sufficient, if properly managed, to supply ten such cities as Richmond with hay. I am well aware of their liability to be overflown, owing to the want of fall in the stream and the lowness of the banks. I am well aware of their comparative worthlessness in their present situation, especially when forced into herds grass. But, in the first place, I believe concert and unity of action alone are wanting to render these lands free enough from water for all the purposes of tillage. This can never be done effectually by separate and individual action To ditch and dyke each farm, costs more than it is worth. But any engineer will inform you that by straightening, and opening, and removing obstructions, the river may not only be confined within its banks, but made navigable for many miles. Is there any other people under the sun, who would have lain so long dormant under such circumstances? No survey, no report, no petition to the Legislature for aid, thousands of the most valuable acres suffered to lie waste and given up to the ravages of an insignificant stream, which might be reclaimed and made the garden spot of Virginia. Why, sir, our northern people would bail out such a rivulet with a washing tub, before they would suffer themselves to be deprived of such an inheritance.

But, sir, reclaimed or unreclaimed, I do not believe that the red top is the appropriate growth of these lands. There is a grass produced spontaneously upon these bottoms, against which I believe a most unfounded prejudice has been engendered. We know it hereabouts by the name of "Chickahominy blue grass." I do not know its botanical name, but it is entirely different from the blue grass of the upper and western country. It is strong and coarse, very succulent, and extremely luxuriant—indigenous to the soil, it delights in these wet bottoms, and, if permitted to remain, will root out every other vegetable. It will always admit of two cuttings, and will readily yield from two to three tons at each cutting—requiring no cultivation. With such an abundant yield, the only question can be as to its qualities. These, I believe, have been greatly underrated. It is not so dainty and delicate as the herds grass, but is, I think, stronger and more nutritious. When well cured, with salt, in a green and succulent state, horses will become very fond of it and thrive on it astonishingly.

I am aware, Mr. Editor, that much harm may be done by misleading people through agricultural communications, and as I wish to mislead nobody, I feel bound to state that the opinions expressed above have been derived from an experience not so full and satisfactory as I could have wished it. But as I know that there are some experienced individuals, who, having the fullest opportunity, concur in these opinions, whilst many more entirely reject them, I hope that this communication will, at least, open the subject for discussion in your columns. If the nutritious qualities of this indigenous plant can be established, it will prove an invaluable article for many other sections of country beside this immediate neighborhood.

Yours, CHICKAHOMINY.

For the Southern Planter.

WHEAT.

Mr. Editor,—I strongly suspect that the "fly-proof wheat" of your correspondent, Mr. Gray, is neither more or less than the "white cone wheat" mentioned by Tull, which he says affords the greatest security against blight and the ravages of insects. This peculiarity he ascribes to the density of its straw, which is more

than double that of ordinary wheat. He thinks that insects and the effect of cold damps reach only the outer vessels, whilst the inner ones are left uninjured to nourish the grain. Of its qualities he speaks as follows:

"Cone wheat makes very good bread, if the miller does not grind too fine, or the baker make his dough too hard: a bushel of cone wheat will make more bread than a bushel of other kinds, and of the same goodness, but it gives a yellow cast to the bread."

This may prove a very valuable variety, and I, for one, feel much interested in its development. Will Mr. Gray be so good as to inform us of the character of the straw, upon which Tull seems with great reason to rest its virtues? and oblige AN INQUIRER.

AGRICULTURAL ASSOCIATION.

We are happy to announce the formation of an agricultural association in the county of Hanover, from whom we have received a copy of their proceedings and constitution—they seem to have embarked in the enterprise with a spirit and zeal that augurs well for their success.

The following gentlemen have been chosen as officers of this Society. Capt. Jesse Winn, President; Henry Robinson, Esq. First Vice-President; N. L. Crenshaw, Esq. Second Vice-President; Capt. R. F. Derracott, Secretary; and Dr. R M. Carver, Treasurer. Mr. Edmund Wickham has been requested to deliver the first annual address. The Executive Committee is composed of C. W. Dabney, Esq., Col. Goodall, and Edmund Winston, Esq.

If we are not much mistaken "Old Hanover" will be second to none in her devotion to the great cause of agricultural improvement, which is going so gloriously forward throughout the State. We know the material of which she is composed. There are few that can vie with the fruits of her alluvial soil, whilst her *Clay* is known throughout the world.

NEW MODE OF PREPARING TIMBER.

A plausible statement is going the rounds with respect to a new process for coloring and otherwise operating upon wood, said to have been discovered by M. Boucherie, of Bordeaux. It simply consists in the application of fluids to the pores of the living wood, which it is said will be taken up and disseminated with the flowing of the sap. It may either be applied to an incision made at the bottom, or the but end of a tree recently cut may be immersed in the liquid; in either case, the fluid, it is said, will ascend and penetrate every part of the tree, except the heart, imparting to the trunk, leaves and branches, its own hue and qualities. In the living tree this effect is obliterated in a few days by vital action. But, if the tree has been severed from its roots, lasting properties may be thus imparted by the use of different fluids.

Qualities of durabily; incombustibility, color, &c. may undoubtedly be imparted to wood by immersion in fluids; provided, it is continued long enough, or provided artificial means are employed to force the liquid into the pores of the wood. This seems to be an ingenious device by which M. Boucherie has availed himself of an operation of nature to steal in, where others have had to force their way.

The experiment is a very interesting one, and may be readily tried—flowers even, it is said, may be colored by sprinkling the soil in which they are about to bloom with certain liquids.

This fact, if substantiated, may, it is evident, lead to the most interesting and important results.

GRAFTING.

A Mr. Houtt, in the "Union Agriculturist," recommends the following, to us, novel mode of grafting. He says:

"When you commence grafting, you have nothing to do but dig around the root of the tree, in whose root you intend to set—when you find a root half an inch in diameter, cut it loose from its mother and raise the outer end of it a little, so that you can make a split in it about an inch or more from the end—then sharpen the graft just at the joint, with one side a little thicker than the other, and open the split end of the root, and slip the graft therein, with the thin side towards the small end of the root—cover it even with the surface with fine earth. and it will sometimes grow to the height of six feet in one summer.

"You may in like manner cut at or a little below the surface, any scion whose root is unconnected with the mother stock, and make a split in its stump, and sharpen your graft in the same way, and open the split and set it in the stump about half an inch below where it is cut; taking care to set your graft so as to cross the bark of the stump, and not perpendicular—the last process perpendicular is so apt to miss taking the sap; but if you set your graft cross or quartering, you cannot miss. You will be careful to cover it with fine earth two or three inches deep, and you may depend on success."

BERKSHIRES.

Mr. Robinson, who is not less remarkable for his practical common sense than for the forcible quaintness of his style, gives the following excellent advice to the breeders of Berkshires:

"Experience is an excellent teacher—as I have been taught a little I will impart it to others engaged in breeding pigs. Great care is necessary with this breed, to guard against the temptation to use them too young. They are so large and fine at eight or ten months old, that

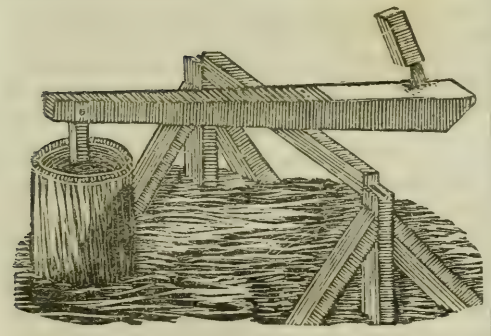
many suppose they are plenty big enough to breed. It is a great mistake. The boar should scarcely be used until twelve months old, and then but sparingly until eighteen. A sow should never be allowed to have pigs until a year old, and then only in warm weather—and it would be better that they were sixteen months old—nature cannot be forced with impunity. The period of gestation in a sow is *exactly* sixteen weeks. Now of my experience—I had two sows last fall on the passage from Albany, got with pig at about four months old. On the first day of January, one of the coldest of the season, one dropped seven and the other two, and as the sows had little or no milk, and were too young to mind their pigs, all died in spite of all that human care could do.

"Yesterday, another sow, just one year old, dropped eight pigs. She is one of the kindest, most careful, and sensible hogs I ever saw; and as the weather is warm, the pigs are all as lively as could be wished. It is characteristic of Berkshires, that they are great breeders, and fine milkers. But do not be tempted to use them too young. But above all things, do not be tempted to do without them.

SOLON ROBINSON.

Lake C. H., Ia., April 2."

HOMMINY MORTAR.



Mr. Editor,—In the second number of the Planter, page 26, you have given us a representation of a contrivance for the economical use of a small water fall. I send you a rude drawing of an apparatus for a similar purpose, which I have seen in operation, and know to answer the purpose excellently well. The cut represents it as applied to a pestle and mortar, which may be used for pounding corn and cobs, or any purpose of the sort for which it may be wanted. It is almost too simple to need description, yet it may be worth while to say, that a section of a spout is represented emptying a stream of water into a trough, dug in one end of a beam resting upon a cross piece, the other end attached to a pestle working in a mortar, burnt out of the stump of a tree. The cross piece, to which the beam is attached, revolves on two pivots at its extremes, working in journals formed in the uprights. When the trough is filled with water, that end of the beam descends, until enough water is emptied out to give preponderance to the pestle, when the trough again ascends within the sphere of the water. The spout is placed obliquely to the trough, so that the trough, in its circular descent, may be carried within and so miss the fall of water which would otherwise keep it down all the time.

This machine works well, I assure you, and is so simple and cheap that it may be made by the plainest hand at an expense of four or five dollars.

Yours, O. K.

We were aware of this application of the principle when we gave the other. A representation, almost exactly similar to the one now afforded, is given in the first volume of the old American Farmer. But we conceived that the simplicity and cheapness of the present form was more than counterbalanced by the superior excellence of the former.

SEEDS.

A Mr. Risley, through the Genesee Farmer, recommends the following mode of treating garden seeds. He says he has pursued this plan for the last six years with eminent success:

"First, soak the seeds in water from six to twenty-four hours—some seeds being slower to admit moisture than others, is the difference in the time required. After soaking, drain off the water, and mix the seeds with a sufficient quantity of earth to absorb the moisture remaining on the seeds: stir them often that they may vegetate evenly, and keep them in a moderate degree of warmth and moisture until they are sprouted, when they are ready to be put into the ground. If the weather should be unfavorable, put the seeds in a cool place, which will check their growth.

"One great advantage of this practice would seem to be, that the plants quickly appear above the surface, so that the hoe, cultivator, etc. can be used easily, before the weeds start."

For the Southern Planter.

RAT TRAP.

Mr. Editor,—The following plan of a rat trap is much used in this neighborhood, but is not, I believe, so generally known, at least used, as it deserves. Take a common barrel, and cut a circular board rather smaller than the upper head, which must be removed. Suspend this circular board at the mouth of the barrel on two pivots, so that it will revolve freely, but maintain a balance horizontal position when undisturbed. Pour water into the barrel six or eight inches

deep, and put a block in the centre, so that the top will appear just above the surface. Provide a board from the floor, or some other means by which the rats can get on the swinging board, which must be strongly baited with some tempting article, secured to it. As soon as a rat places his weight upon it, he is plunged into the reservoir below, when the board regains its deceitful position, and all is again fair without. In the meantime, the rat gains the block, when his distressing cries attract the attention of his sympathising companions. Thus, by means of the combined operation of sympathy and gluttony, two very powerful motives, you have another and another added to the number of the deluded wretches, who fall a prey to this insidious trap.

Yours, A RAT CATCHER.

Mr. C. T. Botts.

To the Editor of the Southern Planter:

STRAW CUTTER.

My Dear Sir,—I am requested by my friend and neighbor, Mr. Hansberger, to procure one of your straw cutters for him, like the one I purchased of you last year.

Being satisfied that it is by far the best article of the kind I have ever seen, and being desirous of seeing such a labor-saving machine in general use, especially in my own section, where so much straw is cut, I hereby request you to publish in the Southern Planter my certificate of its simplicity, strength, and efficiency. Notwithstanding its price, I would advise every farmer, who has straw to cut, and who desires to save money, to purchase one without delay. I would not be without the one I have, if I could not get another, for one hundred dollars. There is not the least difficulty in keeping it in order, and I consider it one of the most valuable labor-saving machines I ever saw.

Your obedient servant,

PETER HANGER.

Augusta Co. near Waynesborough.

PLANTING TREES.

We have noticed several communications lately in our exchange papers reprehending what is said to be a common error of setting trees too deep in the ground. It is advised to set the roots no deeper than is necessary to stay and support the young tree. This may be effected with much less depth than is generally used, especially if every tree has, as it ought to have, a stake firmly driven alongside to which it may be tied. Neither seeds nor roots should be placed beyond the genial influence of the sun and atmosphere.

SALT.

Salt, at the rate of twenty bushels to the acre, is highly recommended by the gardeners of England, particularly for cabbages and beets. It is said also to be extremely beneficial to flowers, especially the hyacinth, whose bloom, it is asserted, will never be perfect at any distance from the sea without it.

For the Southern Planter.

EXTRAORDINARY CIRCUMSTANCE.

Chesterfield C. H. June 25, 1841.

Mr. Editor,—I avail myself of the opportunity, afforded by the establishment of your paper, to apprise my brother farmers of a very singular circumstance, that occurred in this county last spring. My father, Jeremiah Hobbs, owns a cow that last year brought a calf, that died suddenly on the third day after its birth, although, up to that time, it was apparently thrifty. In nine days from the time the cow produced this calf she had another, an uncommonly fine one, which is now living and doing well. The oldest persons in this neighborhood never heard of a similar instance, and it would be interesting to hear if any of your readers ever knew an occurrence of the kind. The fact can be confirmed by the testimony of the Rev. C. W. Friend, and Dr. P. H. Anderson.

Our crops of corn, wheat and grass look very fine.

I hope your paper will be greatly patronised in our county. I have already procured some subscribers for you, and, if you will send me a prospectus, will get more without any charge of commission.

Yours, &c. JOHN E. HOBBS.

We are very much obliged to Mr. Hobbs for his politeness, and will be very happy at all times to afford him an opportunity of communicating with his profession. The fact he mentions is a very singular one and worthy the attention of the naturalist.

WOBURNS *vs.* BERKSHIRES.

Dr. Martin, an extensive breeder in Kentucky, contends, that a stock of hogs, obtained by crossing the Woburn on a large breed of English white hogs, which he calls Berkshires, is superior to the imported black stock generally known by that name. Mr. Fanning of the Agriculturist doubted the fact, and accepted a challenge from the Doctor to feed against him. The Editor was beaten all hollow, the Doctor nearly doubling him in weights. One of the Doctor's pigs gained three pounds a day, and weighed 242 lbs. at six months. This is certainly prodigious, and we believe much beyond what any body else has effected with any other stock. Still, we protest against any conclusions being drawn from a contest of this kind between a farmer and an editor. Mr Fanning ought to have known that the airy visions of an editor's brain were too unsubstantial to fatten even Berkshires, and we think it is probable, from his own account, that his got little else.

The result, like the generality of such experiments, proves nothing, except, that Dr. Martin possesses a stock which is capable of attaining extraordinary weights at early ages; but as we have no account of the quantity of food given to both, or either, we can form no idea of the relative merits of the two, nor can we know at what expense the Doctor gets his meat. This after all is the true question.

From Youatt's Treatise on Cattle, pages 544—5.

MANAGEMENT OF COWS AFTER CALVING.

"*Attention after Calving.*—Parturition having been accomplished, the cow should be left quietly with the calf; the licking and cleansing of which, and the eating of the placenta, if it is soon discharged, will employ and amuse her. It is a cruel thing to separate the mother from the young so soon; the cow will pine, and will be deprived of that medicine which nature designed for her in the moisture which hangs about the calf, and even in the placenta itself; and the calf will lose that gentle friction and motion which helps to give it the immedite use of all its limbs, and which, in the language of Mr. Berry, 'increases the languid circulation of the blood, and produces a genial warmth in the half exhausted and chilled little animal.' A warm mash should be put before her, and warm gruel, or water from which some of the coldness had been taken off. Two or three hours afterwards, it will be prudent to give an aperient drink consisting of a pound of Epsom salts and two drachms of ginger. This may tend to prevent milk fever and garget in the udder. Attention should likewise be paid to the state of the udder. If the teats are sore, and the bag generally hard and tender, she should be gently but carefully milked three or four times every day. The natural and the effectual preventive of this, however, is to let the calf suck her at least three times in the day if it is tied up in the cow-house, or to run with her in the pasture, and take the teats when it pleases. The tendency to inflammation of the udder is much diminished by the calf frequently sucking; or should the cow be feverish, nothing soothes or quiets her so much as the presence of the little one.

"*The Cleansing*—The placenta, or *after-birth*, or cleansing, should be discharged soon after the calving It soon begins to act upon the uterus as a foreign body, producing irritation and fever; it likewise rapidly becomes putrid and noisome, and if it is then retained long, it is either an indication of a weakly state of the cow, or it may produce a certain degree of low fever that will interfere with her condition. Every cowleech, therefore, has his cleansing drink ready to administer; but it is too often composed of stimulating and injurious drugs, and which lay the foundation for after disease. The aperient drink recommended to be given after calving, with the addition of half a pint of good ale to it, will be the best assistant in this case and the only thing that should be allowed.

"Should the cleansing continue to be retained, some have recommended that a weight of six or eight ounces should be tied to the cord, the gentle and continual action of which will usually separate the placenta from its adhesions, without any risk of hemorrhage; but if the after-birth should still remain in the womb, and decomposition should evidently commence, the hand must be introduced into the passage, and the separation accomplished as gently as possibly.

"There is, however, a great deal more fear about this retention of the after birth than there needs to be, and it is only the actual appearance of inconvenience or disease resulting from it, that would justify a mechanical attempt to extricate it."

SMALL BIRDS.

In a report made to the Legislature of Massachusetts, at the session before the last by the Rev. Mr Peabody, he remarks, that "to exterminate birds which do a little harm occasionally, is to protect ourselves from a small evil at the expense of a greater, and in fact securing the fruit at the expense of the tree. Means may be devised to prevent the ravages of birds, but none have yet been discovered to prevent the ravages of insects. The birds guard our fields and gardens from the insect; and if they, now and then taste of the fruit which they have preserved, we can better afford a share to them than the whole to their creeping enemy. To give some idea of the service which birds are able to render, Mr. Peabody notices the computation of Wilson, according to which, a red winged blackbird devours on an average fifty grubs a day—a pair of them, in four months, will consume more than twelve thousand—and allowing a million pair of black-birds to New England, (which is but a moderate estimate,) they will destroy twelve thousand millions of the grub. He also notices the statement of Kalm that after some States had paid three pence a dozen for the destruction of black birds, the consequence was a total loss, in the year 1749, of all the grass and grain, by means of insects which had flourished under the protection of the law allowing bounties on birds."

CHEAP MANURE.

The Louisville Journal recommends, as a cheap mode of manuring, the turning in, in the spring, a green crop of rye, seeded thickly for the purpose the fall preceding. Or if the crop to be planted is a late one, and the rye has been neglected in the fall, a crop of oats may be sowed for the same purpose early in the spring. In this way, it is asserted, by turning in a green

crop the land may be cultivated every year, not only without deterioration but with an increase of fertility. It is recommended to turn in the green crop two or three weeks before putting in the crop that is to be gathered.

This recommendation has been extensively quoted and generally approved. But, with all due deference, we think that upon this subject much is to be said and some nice calculations to be made. Under most circumstances, this, which is the old doctrine of improvement by green crops, will be found to resolve itself into this question. Is it economy to bury in the earth a crop, which, in a few weeks, might be gathered and garnered. Is it not better, if improvement alone is considered, to let the crop remain, and bestow the proceeds of it, when matured and sold, upon the land in another way? We believe that, generally, ripe crops are more valuable than green ones, any way they can be used, and should dislike very much to destroy a field of rye that promised an abundant harvest in a few weeks. It will be answered, that some fields must be kept for corn and other spring crops, which, if not sowed in rye, would lie barren through the winter and spring, and that this is only a mode of keeping a good servant always at work. This is true, and might be a good argument if there was any stint of land in our country. But we must remember that here the farmer always has more fields than he can cultivate every year, and whilst land is so cheap, it is proper that he should. Now, whilst he was ploughing and sowing a field intended for corn, in rye, to be *turned in*, in the spring, he might have been sowing another field in wheat or rye to be *gathered* in the spring; so that the question at last, as we said before, will be, whether he shall sow a crop to be matured and gathered, or whether he will make more by a crop which he cannot permit to come to maturity, but will be compelled to plough under whilst it is green. We apprehend that, upon fair consideration, there will be no hesitation about his choice; for if he concludes green crops, ploughed in, to be more valuable than ripe ones, gathered, we presume he will go on to turn in all his crops, and gather none; the consequence of which will be, that, contrary to Parson Turner's maxim, the farmer will grow poor, as his land grows rich.

DAIRIES.

From a well written essay on the Management of Dairies by Mr. Jos. How, published in the Transactions of the Essex Agricultural Society, we make the following extracts:

"The first and most earnest point to be gained is to obtain *good cows*. It costs no more to feed a good cow, than a poor one.

"The *quality of the milk* is a consideration not less important than the quantity. Those, who never have tried the experiment of setting different cows milk separate have very imperfect ideas of their comparative value. I have known some cows that five or six quarts of milk would raise sufficient to make a pound of butter. I believe this was stated to be true of the Oakes cow, from the milk of which was made twenty pounds of butter a week for several successive weeks; and I have heard the same of others. But ordinarily, it takes ten quarts of milk to yield a pound of butter. It, therefore, becomes a point of great importance, in selecting cows for the making of butter, to obtain those whose milk is adapted to this purpose.

"The *manner of milking* also demands attention. Cows should be milked about the same time each day, and they should be milked *quick and clean*. If a portion of their milk is suffered to remain, this will soon diminish the quantity, and the cows will dry up. It is bad policy to trust milking to children, for they usually do it moderately and imperfectly, and more is lost thereby than would pay the best of laborers.

"The *place for the setting of the milk* is also worthy of attention. This should be cool, well ventilated, and exclusively appropriated to this purpose. For if it is permitted to be occupied in part for other purposes, some things will find their way there which will be injurious to the milk. It should also be properly lighted. Cream will rise more favorably in the light than in a dark room and the quality will be better. Therefore a dairy room above ground is preferable to a cellar. The room should be carefully guarded, by the use of wire gauze, or some other substance at the windows, against the approach of insects or intruders of every kind. The milk should be set in pans uncovered; as the cream will not rise so freely when there is a cover over the pans. Care should be taken not to fill the pans full, especially in warm weather, as the cream will rise quicker and better when the milk is spread over a large surface. The sooner it rises and is removed from the milk the better; and this should always be done before the milk begins to turn sour. When the cream is taken off, it should be kept in tight covered vessels, in cool places, until the churning process; and this should always be before any sourness is discoverable.

"Much care should be taken to separate the butter-milk thoroughly from the butter. More depends on this than any other part of the process in making good butter. Unless this is done, it will be impossible to preserve it sweet and good; if our dairy women would apply double the labor to half the quantity of their butter, and thereby remove all particles of the butter-milk, this one half would be worth more than the whole in the condition which it is usually sent to market. As this is a matter that interests every farmer, and every lover of good butter, (and who does

not love it when it is fair and nice?) I have presumed to forward these remarks. You will use them as you think proper.

"Respectfully yours, JOSEPH HOW.

"*Metheun, Jan.* 6, 1841.

"NOTE.—What I have said in relation to the working of butter, is to be understood, in relation to such butter as had the proper previous management. For if the butter becomes soft, it may be worked ever so long, and not become hard and good; although it may be improved by working. But if it is to be kept, care should be taken that the butter-milk is thoroughly removed.

"It was my intention to have said something on the feed of cows. But my remarks have already extended so far, I will simply say, that there is no feed on which cows can be kept, that will make better butter, than a first rate pasture; such as abounds with English grasses. When this supply fails, let the deficiency be made up by green corn-stalks. Farmers will do well to plant some corn extra, for this purpose.

"The present winter, I have boiled roots for my cows, such as turnips and sugar beets, to which I add a little Indian meal. This food, when properly prepared and seasoned with salt is well received by the cows, and improves the flavor, and increases the quantity of the milk.

J. H."

We copy the following excellent article from the American Farmer. We have not a doubt that the substitution of a lighter diet for the vast quantities of meat consumed in this country would be both wholesome and economical:

CONSUMPTION OF MEAT.

There are few things in the habits of Americans, which strike the foreign observer with more force, than the extravagant consumption of food—and more especially of meat. Truly we may be called a carnivorous people. With all our outcry about hard times, the quantity of provisions consumed in America would support, in health, treble our population in Europe. The vast consumption of *meat* is not only wasteful, but injurious to health, and to activity of body and mind. The body if made of iron, would be unable to perform all the functions imposed upon it at one time—especially is it, we should suppose, without pretending to any science on the subject, deleterious to eat meat suppers—or to eat a heavy meal immediately preceding any necessary action of body and mind. How well this is proved by the experience of the turf. Suppose a race to be made for a heavy sum, half forfeit, and on going into his stable, the trainer finds that although he is sure that his nag is the better horse, the groom has been bribed to give him a gallon of oats and water at pleasure, would he not *at once* withdraw, and pay forfeit sooner than encounter the certainty of paying the full amount? May it not be averred that one half of the provisions consumed in this country might be saved with certainty of avoiding the numerous diseases that arise from plethora, impaired digestion and disordered blood? Let the heads of any family examine the subject, and they will find that a substitution of bread and vegetables and milk for three-fourths of the *meat* consumed, would be attended with economy and better health.

COOKED FOOD.

A Mr. Seldon, of Massachusetts, stated, in a recent agricultural meeting in Boston, that from a bushel of cooked meal he had obtained twelve pounds of pork, whilst the same quantity of uncooked meal would not give more than eight pounds.

It has been doubted whether the advantage of cooking balanced the expense, but the economy of modern conveniences for this purpose has, we believe, settled the question with the most skeptical.

AGRICULTURE IN VIRGINIA.

We extract the following judicious observations from the Lynchburg Virginian:

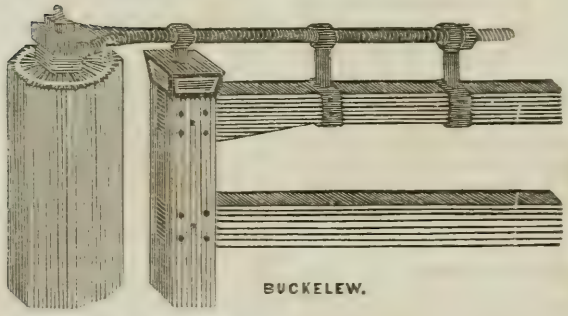
"To the cultivators of the soil in this part of Virginia we submit the following suggestions: Our best and most beautiful lands have been cut down, worked and worn out, and then deserted for the South or far West. It is a fact, and we record it with pleasure, that there are some planters and farmers, who, with the aid of clover and plaster, have enriched their lands, and rendered them highly productive. We know some farms, which, a few years since, produced only one to two barrels of corn to the acre, that now yield eight to ten. The same ground produced only six bushels of wheat, now yield twenty to twenty-five. And this has been done when plaster cost from twelve to twenty dollars per ton. The uncertainty of the wheat crop for past years makes it prudent, that the agriculturist should raise a mixed crop of wheat and tobacco. The time for planting tobacco is at hand; no land should be planted but the richest lots, the richest flats, and the new land that is annually cleared. Plant early; never under any circumstances top over eight leaves; and never cut tobacco until it is thoroughly ripe. The great error of the upper country and South, is, that nineteen out of twenty planters cut their tobacco unripe. Hard firing is another common error, and ought to be avoided. Some fire is necessary for all tobacco that is exported; but many planters fire their tobacco until the oil is removed and the leaf made stiff and starky.

"The completion of the James River Canal to Lynchburg, has opened a new era, and will

operate favorably to the agriculturist of this part of the State. We now procure plaster at $8 per ton, which will soon be reduced to $6 or $6 50. The time is propitious for improvement, and nothing will prevent it, but the want of enterprise and industry on the part of the sons of the Old Dominion. Our tobacco will be superseded by that of the West, unless we abandon its culture in poor land and raise such as will compete with any exported. This can be done; for we have soil, climate, and seasons not surpassed by any State in the Union. The science of agriculture should be studied both in theory and practice, it being the foundation of national wealth and prosperity. No pursuit, says the Father of his country, is better calculated to promote independence, health, virtuous habits, and a peaceful contented mind. The visionary dreams of wealth, by emigration to the South and West, we are happy to state, are rapidly passing away, and a better day is dawning upon our beloved Virginia. Look upon the mass of the whole earth, and no country can be found where nature has been so bountiful in her provisions; but truth requires us to add, where man has done so little towards appropriating them to his use."

For the Southern Planter.

COMPENSATION HINGE.



BUCKELEW.

Mr. Editor,—You and your correspondents have, in my opinion, given us some invaluable hints upon the important subject of farm gates. Whilst, I think you have brought the gate itself almost to perfection, I do not admire the hinge you seem to recommend. The wooden hole or iron ring may be strong, but they are clumsy and unsightly. I send you a representation of a hinge which I adopted some time ago from the "Scottish Husbandry" and which I have found to deserve all the commendations bestowed upon it. It is called the "compensation hinge," and was first used, I think, by a man with the name of Parker. An iron rod, flattened at one end, works around a pivot or journal inserted securely in the top of the gate post, the other end terminates in a screw and nut, and the round part is passed, as represented, through three rings attached to the gate. A similar fixture, not represented, where a hook in the side of the gate post is used instead of the pivot on top, secures the heel of the gate. Here, the rod merely passes through the back upright in the gate, and ends like the upper one in a screw and nut.

Now, if the gate swags or sinks in front from any cause, you have only to unscrew the lower nut a little and screw up the upper one, and the gate is immediately raised and restored to its proper position. I have added a roller, which revolves on a plate around the extreme edge of the gate post, which, I think, adds greatly to the support of the gate, and, of course, causes it to revolve with greater ease. For a front gate, where ornament is desired, and where a small expense is not regarded, I know of no hinge superior to this.

Yours, RUSTICUS.

NECESSITY OF SOUTHERN PAPERS.

C. T. BOTTS:

Sir,—I am much pleased with the plan of your work, and most sincerely hope it will receive the patronage to which it is entitled. We have long needed in the southern country a cheap

work, adapted to our peculiar circumstances. For want of it we have been driven to papers published at the North by men ignorant of the first principles of southern agriculture. What can they know, with their little garden farms, of the principles adapted to our extensive system. They are a commercial, we an agricultural, people; and whilst we may take some lessons from them upon minor points of rural economy, nothing is more absurd than to seek information from them upon the subject generally of southern agriculture. Our climate, soil, and institutions are not only different, but entirely opposite. No experiment made at the north is a test of what may be done at the south, and the difference in the nature of the labor employed in cultivation is sufficient, alone, to vary the system entirely. But, the fact is, they know nothing about farming—they cultivate little patches for amusement, but nature has provided them with another and more profitable employment.

I concur most heartily with you in the opinion, that as much agricultural information lies undeveloped in the bosom of our own State as can be furnished by any other in the Union. It must of necessity be so. We are the oldest agricultural people in the Union. It was here, that the bounties of nature attracted the early settlers; and it is here, that agriculture has been pursued with all the zeal, and all the talent, that has marked Virginia in the councils of the nation. From whence have the farmers of the south and west been furnished but from Virginia soil? Whence come the great agricultural staples, with which the importations of northern merchants are paid for in Europe, but from the sunny lands and skilful hands of the south? And shall such a people, furnishing all, engaged in the active pursuit of agriculture, seek the frigid climate and barren soil of the north for agricultural information? As well might the experienced sailor, who traverses the ocean, ask advice of the timid citizen, that paddles a cockle boat on a fishing excursion.

I hope that your paper will be devoted exclusrvely to southern agriculture, and that it will be supported, if not *exclusively*, at least *universally* by southern men.

Yours, M. E. S.

[We have already declared that the object of our establishment was to foster and cherish southern agriculture. What we can get from our friends of the north, (and there is much that they can teach us in rural economy, as our friend expresses it,) we shall adopt thankfully and without hesitation. But beyond those minor points, which are common to all systems, our readers will see from our extracts, we derive but little assistance from our northern exchanges. Their experiments are made generally upon so small a scale, and under such peculiar circumstances, that they are more apt to mislead, than guide, the great farmer of the south. Many of those reported are, we know, made upon *farms* of less than an acre, and under circumstances totally incompatible with the engagements of our agriculturists. What does a little farmer in Rhode Island know of a system, which exhibits an hundred acres of corn in a single field, or which puts fifteen or twenty thousand dollars per annum in the pocket of one individual? A system, which, instead of employing some half dozen white men only at a particular season, must look constantly to the employment of hundreds of negroes? A system, in short, which differs totally in its great essentials from the one he has been taught to practise? It was seeing and feeling this, that we embarked in the humble attempt to collect and scatter information more appropriate to the south, at an expense that would make it accessible to all. As southerners and patriots then, we call upon southern men to aid and support this enterprise. Give us the information that you possess, and we so greedily covet. It rests with you to sustain and support a paper devoted exclusively to your interests, whose cheapness must alone secure it the most extensive circulation. So far our support, in the way of subscriptions, has been of the most liberal kind, and far exceeded our most sanguine expectations. We have hundreds of friends, for whose warm exertions we return our most cordial thanks, both in our own person and as an humble representative of the cause of agriculture. Our list, large as it is, furnishes us however no return as yet for our labor, nor did we expect it would. It must be evident, from the price of the work, that a very large subscription alone would remunerate the Editor. His labors are much greater than would be imagined, and require his whole time. To study, condense, and furnish some sixty articles with all the attendant attention to the mechanical portion of the work, is no small labor for the month. We would not "spur a willing horse," and hope that our friends, who have been already so kind, will not consider us impertinent in bringing these facts to their attention, and in requesting them not to relax their exertions in our behalf.

If, in this article we have displayed a little egotism, we hope it will be remembered that this number completes our half volume, and that we have not been thus guilty hitherto.]

From the Farmers' Cabinet.

GLANDERS IN MEN.

Sir,—There is a highly interesting article in the London Sporting Magazine for January last, upon this frightful disorder, which, until lately, had been considered peculiar to the horse, the mule, and the ass: late experience, however, has shown, that the poison is not confined to these, but that the human subject is as liable to

be affected, as either of the animals above mentioned. This is a truth of great importance to those whose business and profession call them much amongst this kind of stock, and it cannot be too well or too extensively known, that many instances of death in its most awful shape have unquestionably taken place from contact with the animal while under the effects of glanders.

M. Waldinger was the first to direct attention to the liability of man to be thus affected; urging the greatest precaution in going amongst glandered horses, as the severest injury, and even death, often arises from *inoculation*. He relates, that a groom had his fingers affected with inflammation in consequence of operating on a diseased horse; tumors, precisely similar to those observed on the horse, were soon developed in his limbs, and he was at length cured by filling the wounds with small pieces of lint or cotton steeped in turpentine. Sidon, another veterinary surgeon, states that glanders is transmissible from the horse to the man, causing the worst kind of ulcers; and even mentions a case where a *horse* took the disease from a farrier, who had a glandered sore on his hand, which came in contact with the animal while he was giving him a ball: both died of the disease! A groom slept in a stable at Paris, occupied by a glandered horse; some days after the death of the animal, the groom was attacked by the same disease, which was characterized by pustular and gangrenous sores over the body, the nose, and the throat, below the ears, on the glands, and on the feet. He died on the 12th of February, 1840; and on the evening of his death, a small quantity of matter was collected from the gangrenous wounds, with which a foundered mare was inoculated: in three days the disease had commenced progress, and at the end of twenty-one days from inoculation, the wretched animal was put out of its misery, covered with gangrenous ulcers, which had prevented her from opening her mouth to take food. Thus it was proved, that it was the glanders the man died of, as a horse, otherwise healthy, had been impregnated with that disease by matter taken from him after death. It should be borne in mind, that this unfortunate man only slept in the stable, where had died a glandered horse; he must therefore have taken the disease by *contagion*. This conclusion should serve as a warning to all, how careful and cautious they ought to be, when necessity compels them to have any communication with glandered horses. M. Leone, a veterinary surgeon in a dragoon regiment, in perfect health, was called upon in his professional capacity to operate upon a glandered horse in the regiment: after the operation, he introduced his finger into the wound, to explore the extent of the sore; he had unfortunately a slight bruise on his finger at the time, which in a few days became much swollen; it was extremely painful, and soon covered with fungus-like growths: the wound was cauterized, when he felt the presence of several painful, hard swellings, in several parts of his body, which formed abscesses; and six weeks after the operation, they had extended to the knee-joint and instep. He had the assistance of many physicians, but without any success: tumors formed and soon broke, and still remain open.

Very recently, a young man, a groom to a nobleman, who had the charge of a glandered horse, was in the habit of wiping the face of the animal with his pocket-handkerchief, by which the disease was contracted, and he died in one of the hospitals in excruciating agony, every bone in his head being perfectly carious! These melancholy details lead to the conclusion, that a man is liable to the infection of glanders—a disease hitherto supposed to be peculiar to the horse, the ass, and the mule. It is also ascertained, by inoculation, that the farcy is only a modification of glanders, and may co-exist with that disease. But inoculation is not absolutely necessary for the production of glanders, either in man or beast, for sometimes the simple coming in contact with glandered animals produces this disease; from which we infer that it is contagious, and that glanders in a severe form is an incurable disease, both in man and beast.

The writer had once the charge of a great number of horses on a rail-road, amongst which was one suspected of being glandered: she was a very valuable mare, but the moment suspicion fell upon her, she was removed to other quarters. A veterinary surgeon, on examination, pronounced the disease to be a slight case of glanders, proposing at the same time to bleed and physic the whole number of horses on the road, about fifty in number, as a precautionary measure, and to take the mare into a regular course of treatment. It was thought to be the most *regular course* to shoot the mare at once, which was done out of hand, and there was an end of all anxiety and expense; the doctor himself admitting that by these measures he had been deprived of a long and fat job, amounting to the value of many glandered horses.

J. P.

CREAM.

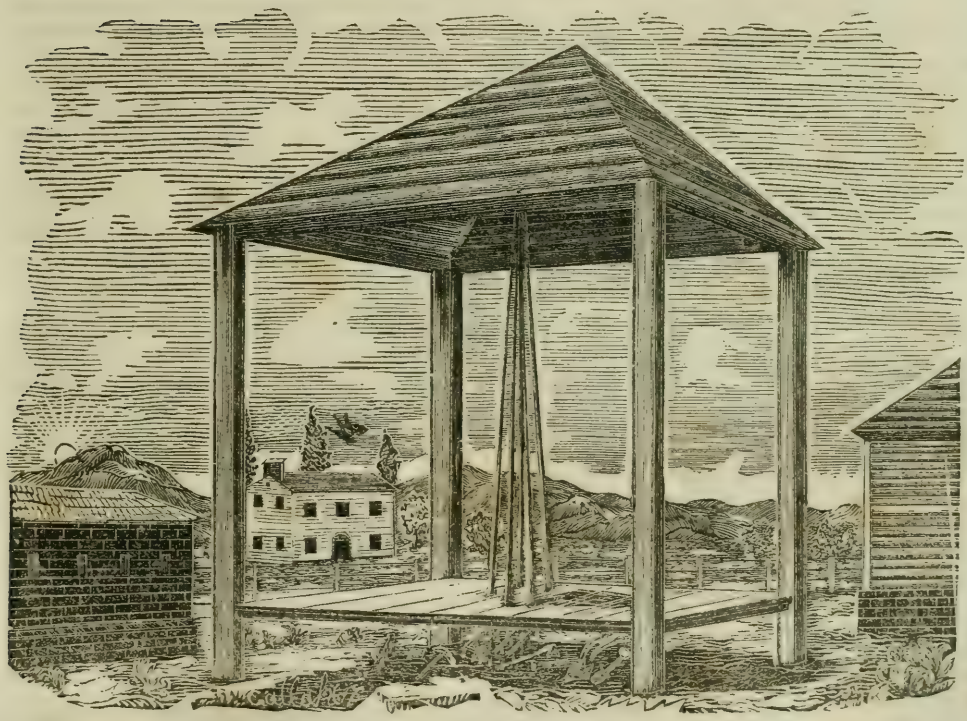
The peculiar rich cream of Devonshire, England, called clouted cream, is obtained by using zinc pans of a peculiar construction, consisting of an upper and lower apartment. The milk is put into an upper apartment; and after it has stood twelve hours, an equal quantity of boiling water is introduced into the lower one. At the end of another twelve hours the cream is taken off much more easily and perfectly than in the common way, and is also more abundant and richer. The result of twelve experiments care-

fully made, was as follows:—Four gallons of milk treated as above, gave in twenty-four hours, four and a half pints of cream, which yielded, after churning fifteen minutes, forty ounces of butter; four gallons treated in the usual way, gave in forty-eight hours, four pints of cream, which yielded after churning ninety minutes, thirty-six ounces of butter. The increase in the quantity of cream is twelve and a half per cent.

The same principle may be applied in the use of common pans. It would be easy, for instance, to prepare some kind of trough, of tin, perhaps, or even wood, into which the pans could set, and hot water afterwards be introduced.

As a close trough would be much better than an open one, you may have a cover in which to set the pans. An ingenious Yankee tinman would soon make a range in this way, sufficient for a common dairy, at no great expense. It would last indefinitely. If it is true that you would thus get some two pounds more butter a week from each cow, the apparatus and trouble would soon be paid for,—to say nothing of the time saved in churning. We do not see why zinc pans—which are said to be decidedly preferable to any other for the dairy—with the tin range as above, would not be quite as good as the complicated and expensive Devonshire pans. And it would be easy for the dairy woman to satisfy herself respecting the *principle*, without either. By using cold water instead of hot, the range would serve to keep milk sweet in warm weather.—*Vermont Farmer.*

HAY HOUSE.



We have been at some expense to have engraved, in very pretty style, a combination of two plans, which together, we conceived, would form an excellent hay house. Some years since, we saw, upon the farm of a practical and successful agriculturist of this State, numerous stacks of hay, covered by very cheap roofs supported on four corner posts securely planted in the ground. The proprietor, with whom the hay crop was a very important one, informed us, that he greatly preferred this to the usual form of an extended roof, which he had formerly used as a receptacle for all his hay. The detached skeletons were equally as cheap, one could be erected in a few hours; there was much less loss in case of fire, and less risk of heating in detached stacks than in a compact body. He, moreover, had, in this way, an opportunity of

separating his different kinds of hay, and getting at any with facility that he might require.

Struck with these advantages, it occurred to us, that with this form of house might be combined a plan very highly recommended by Sir John Sinclair, in his Code of Agriculture. In Scotland, he says, it is common with the best managers to build their stacks of hay around an open pyramidical frame supported on a platform raised from the ground. By this means the hay is secured from the moisture of the earth, whilst, by means of horizontal blocks on the side of the uprights, which support the platform, the ascent of vermin may be prevented. The open pyramid, formed by perpendicular pieces of timber, serves to admit the air into the centre of the stack, and prevent the heating, so much to be deprecated.

The engraving shows for itself how we have conceived the two plans might be usefully and economically united. We ask for the objections, or approval, of more experienced agriculturists.

For the Southern Planter.

A CURE FOR WARTS.

Mr. Editor,—Being much troubled with warts on my hands, I was advised to rub them with milk, or as it is sometimes called, snake weed. Accordingly, I cut the plant, and rubbed the warts with the milky juice that exudes from it. After rubbing them once or twice a day for five or six days, they totally disappeared, nor have I ever had a return of these troublesome visitors. I have since heard of several similar cases where it was equally efficacious.

Yours, J. C. WREN.

Powhatan.

ADDRESS OF THE REV. J. H. TURNER.

We promised in our last to take some farther notice of this excellent address, delivered before the Henrico Agricultural Society at its spring meeting. Since that time, the Society has published the address in pamphlet form, and as it will in that shape probably be distributed amongst a large portion of our readers, our notice of it will be much more brief than we had intended.

With that portion of the address which was devoted to the agitating question of a currency, we have nothing to do, at least in this particular sphere. It was the agricultural portion of the production we had intended to review.

The main object of the address is to describe a well managed farm, and the first point the Parson touches is the FENCING. He deprecates the common worm fence as expensive and insecure; where the situation justifies it, he advises the stone, and of wood, he prefers the post and rail. Although amenable to censure in many respects, we cannot agree with the Parson in blaming our legislature for the necessity that exists of providing extensive fences against the depredation of ranging stock. This, the author intimates, might be remedied by a legislative enactment, which should prohibit the ranging of cattle. Now, we apprehend that however desirable such an enactment might be to some individuals in some portions of the country, yet a large majority would very properly be opposed to it, since, if they were required to keep their stock in their own enclosures, they would be compelled either to enclose extensive ranges, or be forced to forego altogether the benefit of those ranges, which now afford food for their stock for more than half the year. We repeat, that such a remedy in the present state of the country, is neither practicable nor desirable. In our opinion this is precisely one of those errors induced by applying northern instructions to southern circumstances. At the north, where population is much more dense and where there is much less uncultivated land, it is wise and proper to restrain the practice of permitting stock to goat large, because the convenience of a large majority is thereby consulted. But at the south, the reverse of this is the case, and consequently the same reasoning does not apply. But, if we are so unfortunate as to differ with Mr. Turner on this point, we are happy to give our most cordial assent to his next proposition, viz: that a good manager may be known by the use he makes of manure. Upon this subject he says:

"After worrying myself with the vexed question of the best mode of application, I have concluded to dispose of the whole affair in the following summary way—take such manures as you can get, and apply them at such time, and in such manner as you may find most convenient, and I have never seen any lands but would be benefited by the process. If, however, I were to recommend one mode above another, it would be to top-dress the grass lands, and the next year, or the year following, to submit the same to a corn crop."

The Parson insists, that if the alchymists of old had looked in the manure pile, they would have found the long sought for philosopher's stone.

We would recommend the agricultural portion of this address to our readers. It may be had in this city for the trifling sum of 12½ cents.

AMERICAN INSTITUTE.

We have received a circular, informing us that the fourteenth fair of this institution will be held in the city of New York, in the early part of October next.

These exhibitions, which are to be reckoned amongst the most imposing and interesting ever held in our country, have, we doubt not, been productive of incalculable good by the emulation they have excited in the agricultural and mechanical arts. They are now so well known as

frequently to induce, and amply repay, visits from the most distant parts of the Union. More than one hundred thousand visiters have been admitted; and more than fifteen thousand specimens of domestic products exhibited, at a single anniversary.

We are happy to see that the Legislature of New York, aroused to the importance of the cause in which it is embarked, has appropriated to this institution the sum of nine hundred and fifty dollars per annum, for five years, to be distributed in premiums. This, however, is rather by way of compliment and approval than for the purpose of support, which the institution does not need, as their receipts or entrance money has amounted to the enormous sum of $25,000 at one exhibition.

BEE BREEEING IN THE WEST.

We acknowledge the receipt of a little work with this title, from the office of the Western Farmer. We handed it to a gentleman, who takes great interest in the subject, and he assures us it is the best treatise upon this subject he has ever seen. In our next, we shall probably express our own opinion of its merits.

OXEN.

Although, in our climate the ox can never be used as extensively and to such advantage as at the north, yet, even here, he is an useful animal, and should form a portion of the stock of every farm. For irregular farm work he is invaluable. From a letter to the Yankee Farmer, written by Mr. A. G. Sheldon, for whose practical knowledge, especially upon this subject, the Editor vouches, we make the following extracts:

"The following I give as my opinion concerning the marks of a good working ox:

"1. Long head, broad and oval between the eyes, the eye keen, full, and pleasant. Such marks denote ability to receive instruction, and readiness to obey.

"2. Fore legs should be straight, toes straight forward, hoof broad, not peaked, distance short between the ancle and the knee. These enable the ox to travel on pavements and hard ground.

"3. Full breast, straight on the back, round rib projecting out as wide as the hip bones These are indications of strength and good constitution.

"When the toes turn out, the knees bend in. The crooked kneed ox is apt to become lame by holding heavy loads down hill.

"The ox with horns very large near the head is apt to be lazy, and will not stand the heat of the day. The black eyed ox is apt to run away."

Mr. Sheldon is either a very fanciful gentleman, or a very minute observer.

"The best way to feed oxen for hard work is to give each ox two quarts of meal, wet, and mixed with chopped hay, three times a day, and what hay his appetite naturally craves besides. This is the highest feed the working ox ought to have, and will enable the good ox to work ten or twelve hours every day. I think rye and Indian meal mixed together is better than all Indian. Farmers, who do not work their oxen hard, have no need of giving them so much meal.

"From experience, I do say, in my opinion, steers, broke quite young, are worth for hard labor twenty-five per cent. more than oxen that have come to their growth before they are yoked."

LIME.

In a long letter, from Dr. Wm. Darlington, of Pennsylvania, in answer to certain inquiries propounded to him by the late Judge Buel, he expresses the following opinions upon the use of this wonder working article:

"Lime, undoubtedly has a good effect in soils which are sandy,—even where sand predominates; but I believe its meliorating properties are most conspicuous in a clay soil,—or rather in a stiff loam. A good proportion of decomposed vegetable matter adds greatly to the beneficial effects of lime; and hence our farmers are desirous to mingle as much barn-yard manure as possible with their land dressings, and to get their fields into what is called a good sod, or turf—full of grass roots. Then a dressing of lime has an admirable effect.* The soils indicated by a natural growth of black oak, (quercus tinctoria) walnut, (juglans nigra) and poplar, (liriodendron)—and those in which such grasses as the poas and festucus best flourish, are generally most signally benefitted by the use of lime. In short, I may observe, that lime has been found more or less beneficial in every description of soil in this district. It is most so on hilly, or rolling lands where clay predominates,—less permanently so among the mica slate,—and least of all, on the magnesian rocks. The soil on these last is rarely worth cultivating.

"The quantity of lime, per acre, which can be used advantageously, varies with the condition and original character of the soil. Highly improved land will bear a heavier dressing than poor land. On a soil of medium condition, the usual dressing is forty to fifty bushels per acre. A deep, rich soil, or limestone land in the great valley, will receive seventy to eighty—(and I am told even one hundred)—bushels to the acre

"* The yard manure is not usually mingled with the lime, when the latter is first applied. The practice is, to lime the Indian corn ground prior to planting that grain on the inverted sod,—and the ensuing spring, to manure the same field for a barley crop—or to reserve the manue until the succeeding autumn, and apply it to the wheat crop. It is not well settled which of these is the better practice. Each has its advocates; but it is most usual to reserve manure for the wheat.

with advantage. On very poor land twenty to thirty bushels to the acre, is deemed most advantageous to commence with. It is usually repeated every five or six years—then every time the field comes in turn to be broken up with the plough; and as the land improves, the quantity of lime is increased. The prevailing practice here, is to plough down the sod, or clay, in the fall or early in the spring,—harrow it once—and then spread the lime (previously slaked to a powder) preparatory to planting the field with Indian corn. Every field, in rotation receives this kind of dressing; and as our farms are mostly divided into about half a dozen fields, the dressing of course comes once in six years, more or less, according to the number of the fields. Some enterprising farmers, however, give their fields an intermediate dressing, on the sod, after they come into grass, which I consider an excellent practice—tending rapidly to improve the condition of the land.

"It is usually applied, as already intimated, to the crop of Indian corn, in the spring of the year—say month of April. Occasionally it is applied previously to sowing wheat in autumn. When used as a top-dressing, on the sod, it is generally applied in the fall—say November. The prevailing impression is, that it is most advantageously applied to the Indian corn crop; and hence the general practice. But the truth is it is highly advantageous at any, and at all seasons, and our shrewd old farmers have a saying, 'Get your lime on for your corn if you can—but be sure to get it on the land, some time in the year.'

"As already stated, after the sod is ploughed down for Indian corn, it is usually harrowed once, to render the surface more uniform. The lime is spread as equally as possible over the field, and then the ground is well harrowed in different directions, in order to incorporate the lime with the soil. Soon afterwards the field is marked out, and planted with corn. The plough is rarely if ever used for the purpose alluded to. I have mentioned above, that lime is occasionally used as a top-dressing for grass. It appears to be particularly beneficial to that crop; and answers extremely well when applied in that manner. The practice of applying it to Indian corn as above related, is however, chiefly followed; and the application of a dressing to each field in rotation causes as much labor and expense every year, as our farmers generally are willing to incur. Lime has rarely been used as a top-dressing to *grain* crops, within my knowledge.

"I have already intimated that vegetable matters, and especially yard manures, are highly important in conjunction with lime. Both are valuable, even when used separately, but when *combined* the effect is most complete. If to this be added the great secret of good farming, viz: to plough only so much ground as can be well manured—the state of agriculture may be considered nearly perfect.

"Lime is in some instances added to earthy composts, preparatory to distribution on the fields: but it is doubtful whether the extra labor of this method is compensated by any peculiar advantage. It is not generally practised.

"There is no soil in this district deemed worthy of cultivation, on which lime is *wholly* inoperative as a fertilizer. On some sterile, slaty ridges, and on magnesian rocks, it has indeed but a slight effect; and even the benefits of barnyard manure are very transient. In low, swampy grounds also, unless they are previously well drained, the labor of applying lime is pretty much thrown away."

NEW PLAN OF HORSE SHOES.

A Frenchman by the name of Jony, now resident in Poland, has invented a new method of shoeing horses, for which the Emperor has awarded him fifty thousand rubles, besides an exclusive patent. Jony covers the entire hoof with iron, and the bases of his shoe, or, as it is called, sandal, is perfectly smooth. This method of his is being adopted in all parts of Russia. It requires neither nail nor screw; it is extremely cheap, and has the important characteristic of great lightness. Horses whose hoof have been destroyed by bad shoeing, are, by the use of these "hippo sandals," restored in a short time to their former state of efficiency, and may be used as soon as provided with them. Some horses have been brought to Mr. Jony's smithy, which could scarcely limp along, and with their hoofs in so lamentable a state, that the common mode of shoeing could not have been applied to them; but after performing a slight operation upon them, and putting the new sandal on their feet, they were sent back to their owners in a comparatively sound state, and fit for work.

FATTENING FOWLS WITH POTATOES.

There is great profit in feeding geese, turkies, and fowls of every sort, with potatoes and meal mixed; they will fatten in nearly one half the time that they will on any kind of corn, or even meal itself. The potatoes must be bruised fine, while hot, and the meal added, when the mess is given to them.—*Soc. of Arts.*

A NEW AND RAPID METHOD OF SALTING MEAT.

A new mode has been invented of curing meat in a very short time. The meat to be cured is placed in an iron vessel of considerable strength, connected by a pipe and a stop-cock with the brine tub, also with an exhausting pump. The cover having been screwed down on the vessel, the air is extracted and a vacuum established, whereupon the stop-cock being properly turned,

the brine rushes in and takes the place of the air, filling the pores of the meat, and penetrating thoroughly the animal substance. Lest, however, some parts of the meat might not have been impregnated with the pickle by this re-action and the common atmospheric pressure, more of the liquid from the tub, prepared to taste with salt alone, or with saltpetre, or sugar, or spice, or alum, in the case of hides, is pumped in by a small condensing engine (connected, of course, also with the iron vessel) until a pressure of from 150 to 200 lbs. on the square inch be attained. Now, the animal substance is allowed to remain under pressure for about ten minutes, and the process is complete. The meat, when taken out, is thoroughly saturated with brine; the full flavor of which is imparted to it, and well cured, as it is termed.

MISCELLANY.

THE FARMER'S LIFE.

The following from the pen of Colman is not less just than beautiful:

"What a means of imparting pleasure is an improved agriculture. How many charming examples present themselves among us of improvements which every eye gazes upon with unmingled delight. Let a man, according to his power, take his ten, his twenty, his fifty, his hundred acres. Let him comb the hair, and wash the face of nature Let him subdue, clear, cultivate, enrich, embellish it. Let him smooth the rough places, and drain the wet, and fill up the sunken, and enrich the barren. Let him enclose it with a neat and substantial fence. Let him line its borders and road sides with ornamental trees, and let him stock every proper part with vines and fruits. Let his fields and meadows wave with their golden harvest, and let his hills be covered with the herds rejoicing in the fulness with which his labors, under the blessing of God, have spread their table, and who, when he goes among them, hasten from all sides to meet him and eagerly to recognize in him a friend and benefactor, and lick the hand which is accustomed to feed and fondle them. Here now let us see the neatly painted cottage with its green shades, its piazza trellised with vines, its sides covered with the spreading elm, or flowing acacia, with here and there the beautiful fur to shade the picture, and the mountain ash showing its rich clusters of crimson fruit among the deep green foliage, and the smooth and verdant lawn stretching its soft and beautiful carpet to view; then look again and see the parents at the close of day, resting from their labors and enjoying the calm evening, with their pledges of mutual and devoted affection rioting before them in all the buoyancy of youthful innocence and delight; and if, at such an hour as this you can hear the hymn of grateful praise rising from this humble abode of peace and love, and its charming notes mingling with the music of the gurgling brook that flows near by, or broken by the occasional shrill and hollow notes of the gentle and fearless birds, which deem themselves loving members of this loving household; if then, whether traveller or sojourner, your heart is not touched with this charming and not unusual picture of rural felicity, cease to call yourself a man. If still you sigh for the bustle and the noise and the confinement of the city, with its impure water and its offensive odors, with its despicable affectations, with its heartless formalities, with its violent excitements, with its midnight festivities, with its utter destitution of sympathy, with its low estimate of human life, with its squalid poverty, its multiplied forms of wretchedness and crime, its pride, its vanity, its ambition, its pomp, its servility; then go back to your gilded prison house, and to pleasures which an uncorrupted and refined taste, accustomed to drink in the free air of heaven, and to appreciate its freshness, its purity, and its salubrity, will find no occasion to covet or envy. The man who by his cultivation and good husbandry presents such a picture to the passer by, shall he not be called a benefactor to the community? Has he not done much to improve and bless society by his example? Has he not built a monument to his own honor more eloquent than the marble?"

ENTERPRISE.

There are many points of similarity in the character of the Scotchman and the Yankee. The same spirit of enterprise, the same care for thrift, the same sound practical sense which is characteristic of Sawney marks the character of Jonathan.

A late notice of an American who from a poor sailor boy has risen to be an admiral in the Russian navy reminds us of the following anecdote equally illustrative of Scotch enterprise related by Dr. Anderson:

"The Russians and Turks, in the war of 1739, having diverted themselves long enough in the contest, agreed to a treaty of peace. The commissioners, for this purpose were, Marshal General Keith, on the part of Russia; and the Grand Vizier, on that of the Turks. These two personages met, and carried on their negotiations by means of interpreters. When all was concluded, they rose to separate; the marshal made his bow with his hat in his hand, and the vizier his salam with his turban on his head. But when these ceremonies of taking leave were over, the vizier turned suddenly, and coming up to Marshal Keith, took him cordially by the hand, and in the broadest Scotch dialect, declared warmly that it made him, 'unco happy to meet a countryman in his exalted station.' Keith stared with astonishment, eager for an explanation of this mystery, when the vizier added, 'Dinna be surprised, mon, I 'm o' the same coun-

try wi' yourself. I mind weel seeing you, and your brother, when boys, passin' to the school at Kirkaldy; my father, sir, was *bellman o' Kirkaldy.*'"

THE TWO LAWYERS.

We commend the following anecdote to the consideration of those who are about to employ the legal fraternity to adjust their pecuniary squabbles. It will remind our readers of the old caricature, "the Division," where the lawyers are represented as retaining the oyster, and handing the shells over to their respective clients:

"An opulent farmer applied about a lawsuit to an attorney, who told him he could not undertake it, being already engaged on the other side; at the same time he said, that he would give him a letter of recommendation to a professional friend, which he did. The farmer, out of curiosity, opened it, and read as follows:

"Here are two fat wethers fallen out together,
If you'll fleece one, I'll fleece the other,
And make 'em agree like brother and brother."

The farmer carried this epistle to the person with whom he was at variance. Its perusal cured both parties, and terminated the dispute."

TO CORRESPONDENTS.

The suggestion of T. J. E. with respect to the management of agricultural exhibitions, has been handed to the executive committee of the Henrico Agricultural Society, and meets with great favor from them.

We agree with him in thinking it desirable that the awarding committee should not know the owners of articles offered for premiums. It is proposed to effect this by raising a receiving committee, who shall number the articles offered, and the awarding committee shall know them only by the number. We like the idea very much; it not only prevents partiality, but what is much more common, the suspicion of it. There is nothing that we receive and publish with more pleasure than hints upon the conduct and management of these most valuable institutions.

To our friend B. J. of Surry, we return our thanks for the long list of names sent us and for his flattering commendations. We assure him he need not fear that the Planter will ever be "polluted with the politics of the day," or that it will ever be diverted from the legitimate object of its establishment.

We decline publishing the communication of C. M. F. because we have reason to think that the flattering prospect for the wheat crop has been materially impaired since the date of his letter.

Richmond Monthly Markets, July 7th, 1841.

Review of the Richmond market for produce for last month, and the current rates at *this date:*

Tobacco.—The inspections have been large, and the demand has been steady—prices now range as follows: Lugs $4 25 a $4 75, and very good at $5 a $5 50—leaf $5 50 a $11—very superior for manufacturing $12 a $16.

Flour.—The supplies have been moderate for a month past, and the stock has gradually diminished, till it has become very moderate—sales can now be made at $5 25 a $5 50.

Wheat.—*Old* stock exhausted—no supplies of new received—it is probable price will start at $1 25 or $1 30.

Corn.—The supplies have been moderate—sales at 65 a 70 cents. Bagwell, Smith & Jones.

Tobacco Inspections of Virginia to 30th June, 1841.

		1840.	1841.
Richmond passed and refused,		12,804 h'ds.	13,430 h'ds.
Petersburg	do.	11,650 "	11,582 "
Lynchburg	do.	8,586 "	7,949 "
Farmville	do.	3,563 "	3,464 "
Clarksville	do.	2,128 "	2,500 "
All others	do.	1,000 "	1,050 "
		39,631 "	39,975 "

Foreign Exports for month of June, 1841.

		TOBACCO.
June 3.—Brig Essex, Antwerp,		557 Hhds.
" 10.—Ship Whitmore, Cowes,		299 1-2 "
" 19.—Ship Medora, Genoa,		569 "
		FLOUR.
" 21.—Brig Long Island, Barbadoes,		1,200 bbls.

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THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.* | Tillage and Pasturage are the two breasts of the State. *Sully.*

C. T. BOTTS, Editor. **Opposite Merchants' Coffee House, Main Street.**

VOL. I. RICHMOND, AUGUST, 1841. No. 7.

DRAINING.

We are inclined to believe the very greatest improvement in modern husbandry is the system of complete and thorough draining now insisted on by the best agriculturists of the day. That a tenacious and impervious subsoil must be relieved from the water collected and retained on its surface, before the earth can be fitted for the growth of vegetable matter, we think has been most clearly and satisfactorily ascertained. The mode of effecting this object may be a matter of doubt, and, although it is probably the most costly, we believe that under draining or blind ditching, will, in the end, be found the most economical. The mere expense of cutting the ditch is the same, probably, whether a blind or open way is used; but in the covered ditch there is the additional expense of the arrangement, by which the bottom may be kept open whilst the top is closed. This additional expense is considerable, and varies with the means used, which will be different according to circumstances. In England semi-circular tile is used, which is too expensive for the means of our farmers generally. In this country resort is frequently had to stones, with which the bottom of the ditch is filled, and in some very tenacious soils, it is said that the following method will answer. Let a trench be cut at the bottom of a ditch with sloping sides, so that the trench will be smaller at bottom than at top. The top of the trench is of course narrower than the bottom of the ditch; cover the trench with plank or stone, and fill the ditch with earth. It is said the trench will continue open without either washing or caving.

But where timber is as plenty as it is with us, we would recommend a trial of the following mode. Dig a ditch two feet deep, one foot wide, take three pine planks, one inch thick and seven inches wide, make a trough by nailing them together, lay it in the bottom of your ditch, bottom upwards, and fill in with dirt. The air being thus excluded from the plank we believe it will last for centuries; and as to the expense, it cannot exceed four or five cents a foot. We have never known this method tried, but see no reason why it should not answer; and believe that, under most circumstances, it is the cheapest that can be resorted to.

Intimately connected with this system of draining is the plan of subsoil ploughing. By this is meant the breaking up of the earth to a greater depth than is used in the ordinary process of cultivation. A very singular fact has been discovered in the practice of modern husbandry; a stiff clay, impervious to water, when once broken up, never runs together again. This is true with respect to all except a particular species, which we know as *pipe* clay. Advantage is taken of this discovery to run a plough, of particular shape, called a subsoil plough, in the bottom of a furrow made by the ordinary plough, so as to loosen without turning up the subsoil. By this means the excess of water, which would otherwise have been retained stagnant about the roots of the plants, to their serious injury, is now distributed to a much greater depth; and by the conjunction of open or under drains is carried off entirely.

The relief thus afforded to a soil of this character has been known to double, and even quadruple the product, and there is very little soil, unless it be too loose and open, that, in its natural state, is not of this retentive character—consequently a man had better, if it be necessary, sell one half of his land to drain the other.

If we can succeed in awakening the public interest on this important subject, we will spare no pains to collect the opinions of the best agriculturists as to the details of the matter, in what direction and at what distances ditches should be made, how they should vary with the character of the ground, &c. In the mean time, any of our friends who have acquired practical information upon the subject, will confer a favor upon us and the community by forwarding us the result of their experience.

ORCHARDS.

We have often heard it asserted that orchards were more trouble than they were worth; but we have always noticed that this remark was made by people who took no trouble at all with them; and we doubt not, that, to the man who merely plants his trees and trusts to chance for their future management, they are not worth the trouble of planting. But, properly managed and carefully attended, they are undoubtedly sources of great profit as well as pleasure. How much to be envied is the possessor of an orchard of luscious fruit, which affords continued repasts of the most healthy and delightful nature to his family and friends. And aside

rom any calculation of the saving of food, is not the gratification afforded those around us worth the little pains required to obtain us the most delightful fruit? Here we have again the old cry of the climate. This is the general scapegoat for all kinds of laziness and improvidence. Really one would think, to hear the continual excuses of these slothful and careless cultivators, that our atmosphere possessed the blighting effect of the upas tree, destroying every thing that comes within its influence. On the contrary, it is of that moderate and temperate character, that is best adapted to the production of some of the most delicious fruits. If it is meant that our climate will not produce good fruit without care or attention, we will yield the question—but our people should see the pains bestowed upon the orchards at the north, which is more than an hundred fold repaid, and then they would perceive the reason that we do not have the finest fruit at the south. We would find, that, by excessive care, *they* force nature to yield her fruits, despite their climate, whilst *we* refuse her the helping hand she condescendingly solicits. A few simple rules as to the planting, and a little care in the after management, which would form an elegant and healthy exercise for the proprietor himself, will ensure to any farmer in Virginia as great a variety of fruits as can be boasted by any one section of the world. There is no occasion for the expense and trouble of seeking nurseries for young trees. The process of grafting and budding are too well understood to be described, and every man should be his own nursery man. Let him annually plant out a few seeds for stocks, upon which he should prefer to graft such fruit as has been submitted to the test of his own palate, and which has been the production of our own climate. There is an abundance of such, scattered about here and there, of the finest flavor, to give us every desirable variety of the finest fruit. We have the means in our own power, if we choose to exercise them, of raising up with little labor and less expense, delightful orchards in every part of the country.

We will try and obtain, if desired, from some of our most successful orchardists, general rules for the management of trees in our climate. In the mean time we extract from the Monthly Visitor the following remarks on

GRAFTING.

Scarcely one man of a thousand understands how a tree is to be grafted, much less how it should be treated after the graft has been set in the stock, and has sprung into life.

We had a preparation of grafting three years ago: a small portion of the grafts are living, and we may possibly get apples from a few of them this season. But we can now see the erroneous manner in which those grafts were set. In almost every case the scion was placed in a stock double its proper size; and the fault discovered is that when the graft grows it is very likely to make a diseased limb from the unequal size of the scion and stock. Moreover our experiment failed from suffering the sprouts and suckers to stand with the grafts upon the tree, thus dividing the growth and retarding the progress of the scions, so that they will not become bearable for several years.

The present season we have had the advantage of a more skilful and experienced hand. Mr. Peter Foster of the Canterbury Third Family, whose orchard we noticed in the Visitor of August last, agreeably to an engagement then made, appeared at the proper time this season and spent the greater part of two days upon the little orchard attached to our premises. He went to work in his own way, finishing out the trees where the old grafts were living with scions taken from them, and setting entirely new other trees with several kinds of the best apples. He commenced the work by making a wooden horse, so that he could stand and work upon the tree at a higher or lower point, where he could saw off the limb of the proper size. On some of the trees he placed as many as twenty-five to fifty grafts, taking off the limbs that were unnecessary to the proper shape of the tree, and filling those that might be usefully left. Two scions were set upon a stock; and with this stock another limb was left to be resorted to in case both grafts shall fail. In this way the trees were left, until about a fortnight ago Mr. Foster came over and took a look at them. During the short time he stopped at the orchard, finding that most of the scions had started from the bud, he stripped one of the trees of its supernumerary limbs and branches, and left directions to have the others treated in the same manner. This has since been done. The trunks of the trees stand divested of their foliage, with the exception only of the grafts themselves. The grafting took place about the 10th of May, and the limbs were taken off about the 10th of June. The trees now present a beautiful, although a somewhat naked appearance compared with other apple trees at this season; and knowing that all the foliage upon them has sprouted from the small shoots that were this spring inserted, the idea at once associates itself with this appearance, that a worthless tree of sour and distasteful apples, is in a few weeks converted into a tree soon to bear the choicest fruit.

Witnessing the operation upon these trees, we readily perceive how the bearing of grafted fruit trees may be hastened. The whole sap of the tree, it will be seen, is at once thrown into the grafts; and these will probably in that condition grow more the first season than they would gain in four seasons while the roots and body of the

tree are affording nourishment to natural limbs and foliage upon the same tree of ten times the amount.

Some of the scions this year set had blows upon them, which may hardly be expected to bear apples the present season; but it would not more surprise us to have those scions bear next year than it has to witness the progress which they have already made.

The orchard, which has been grafted and nurtured under the care of Mr. Foster at Canterbury, although the first grafts were set only six years ago, produced last season something like a hundred bushels of the grafted apples. The product will soon be increased ten fold.

To the Editor of the Southern Planter:

My dear Sir,—I see you have published the remarks which I submitted as an introduction to my hog essays. This encourages me to proceed in the undertaking. You have, however, omitted one thing, which I requested you to do; and as I consider this an affair of great consequence, I must again call your attention to it. The probability is, that I shall continue to harrass you on this point, until you comply with my request. It is this—that you will furnish as accurate an estimate as you can of the immense quantities of meat which are regularly brought to Eastern Virginia every year, and consequently the immense amount of money which is carried away from us for this single article. Your office is cool, and it requires a cool place for such calculations in this hot weather. Whilst therefore I am in the harvest-field busily employed in taking care of the crop which a bountiful Providence has given me, you will I hope retire to some cool corner, and there make out the estimate which I request.* For my part, I feel humbled when I reflect upon the dependence, the *degrading dependence* to which we submit in regard to other sections of our country. If we want a bundle of hay, we go to the north for it; and if we want a horse or mule, or hog, we go to the west for them. Nor is this the worst of it, for large quantities of our money go there also. No wonder then that the balance of trade is continually against us, and that we remain poor, whilst other portions of the country are getting rich. I wish *you* therefore to show the *amount* of the evil, whilst *I* endeavor to suggest the remedy. But my business at present is with the hog.

The next thing to be considered is—what kind of hog is most profitable for the farmer to raise? I answer at once, it is the hog which combines the greatest thrift with the earliest maturity; or it is the hog which comes to maturity in the shortest possible time, and at the least possible expense.

The good points in a hog, as I think, are great length of body, shoulder and back broad, legs very short, ham full and square, and as a consequence of all these, carcass very deep. In such an animal the weight is invariably great in proportion to the compass. Some hogs that I have seen, present one of these good points, but are defective in others. They have for instance the broad shoulder, but the body is so short as to furnish no middling, and are perhaps thin in the ham also. I call that hog the best then, which will give me a good full ham, a good large middling, and a good broad shoulder, and all this with as little legs and head and other offal as possible.

You see from the above, that I attach no great importance to mere *size*, on the contrary I consider *excess* in size as an objection. I never saw an overgrown animal, horse, mule or hog, but was coarse in feature and unwieldy in motion. Such animals also, are usually enormous devourers of food. Some time ago Mr. Cottrell in the upper end of this county, had a hog of such extraordinary size, that he sent him about as a show. He weighed (if I recollect aright) more than 1200 lbs. live weight; and yet a near relative of the owner told me there was no economy in rearing such hogs, for said he, "he eats as much as a horse." The question therefore with me is, not how can I get the *biggest* hog, but how can I raise my hog to a good weight in the shortest time and at the least expense.

Nor am I of those who think, that because a hog is a hog, there is no difference between them; and that if one hog differs from another, it is owing to some better treatment, and not to some peculiar trait in his kind. I once inclined a good deal to this popular theory myself, but subsequent experience and observation have thoroughly cured me of it. For several years I had been in the habit of raising hogs to the amount of my family consumption. My practice was to keep them up and feed them well; and having a thrifty breed, they generally rewarded me with their manure and flesh to my entire satisfaction. They were a cross of what is commonly called the Skinner hog, or our more common breed, I however called them the corn-house breed, and truly they were well named, for if I had a fat hog, I had at the same time an empty corn-house.

In the mean time I had heard of the celebrated Berkshire, and my agricultural papers came to me time after time, presenting (as they said) an exact likeness of that famous animal. But as I knew that painters often flattered the

* We have endeavored to obtain some statistics on which to found such a calculation, but find it impossible to make even an approximation to the truth. We have however ascertained enough to satisfy us that the amount is enormous and well worth consideration in a national point of view.—Ed.

human countenance, I thought it was very possible for the engraver to perform the same kind service for his hog also. And especially as these flattering accounts were generally accompanied with an offer to sell, I looked upon the whole as a mere imposition. The multicaulis humbug had just passed away, and I regarded this as another effort to gull the public. Thus matters stood, when a valued neighbor of mine borrowed a young Berkshire boar to improve his own stock of hogs. I saw this animal, and although he had been crippled in his feet and badly treated in other respects, there was something in his whole appearance which made it evident that he was very superior to any hog I had ever seen before; but as my neighbor had been imposed on in the mulberry affair, I was still incredulous about the hog. At length the progeny of this young boar made their appearance, and the pigs from common sows, were so strikingly improved that all my suspicions immediately gave way, and I actually paid my neighbor $20 for one of his best half-blood pigs. Since that time I have seen many Berkshires and now own several of of them, and I hesitate not to say, that for great thrift and early maturity, for peaceable and quiet habits, and indeed every other desirable quality, *this is the hog for farmers*, nor is there any mistake about it.

You will see from this statement how slow and guarded I have been in coming to the above conclusion. It was not, in fact, until conviction was *forced* upon me that I yielded my assent; and this too after I had seen the Bedford or Woburn, the No Bone, the Parkinson, the Byfield, the Essex Half Black, commonly called the Skinner, the Barnitry, besides other varieties which are a manifest improvement upon our original stock of hogs. After seeing and carefully examining all these, and owning several of them, I must give the decided preference to the graceful Berkshire, and therefore recommend him to my fellow farmers.

To this hog there is one, and but one objection, and that is the great price at which he now sells. But this, as I think, may in most instances be easily obviated. The plan is this—let some spirited breeder procure a boar of the genuine breed; and here I am aware is a difficulty, for such is the demand for this hog at present that many half-bloods and other spurious breeds are imposed upon the anxious purchaser as the genuine article. There are, however, many honest breeders, and among them several with whom I am personally acquainted, who would scorn an imposition of this kind. At all events, let a genuine boar be procured—select the most convenient point in the neighborhood and there stand him at a moderate price, just as people now stand their stallions. Call in the incredulous to see him, and especially let them see his pigs from a good common sow of any kind, and my word for it, he will soon have business enough to do. I now have two boars, and although I paid what is generally considered a high price for them, I shall from present prospects, more than get back their original cost before the close of the year.

Having now determined the kind of hog, which above all others I can recommend to my brother farmers, I will defer for your next what I have to say about their accomodations. In the mean time, let me congratulate you on the improved form of your last number. Your publication is now approaching what we farmers need, a work made up of short, plain treatises on practical subjects. Continue your friendly visits among us; tell us in person as well as in your work, *what* we ought to do, and *how* we ought to do it. We will give you a cordial welcome, and in the name of the farmers I promise you the plain hospitality for which they are celebrated. Wishing you all possible success in your laudable undertaking, I am &c.

J. H. Turner.

LEAF MANURE.

Mr. Planter,—I observe a piece in your fifth number on the above manure, in which the opinion is expressed that the removal of leaves from wood land will impoverish the land. Now, I suppose that if wood land was annually raked clean of all its leaves, leaving the ground bare, it would certainly impoverish it; but I hold the opinion, that it does not require all the foliage of the forest, cast off every autumn, to sustain its growth. I have been in the habit, for the last sixteen years, of hauling into my farm pen, stables, stable lot, hog pens, &c. as much offal from the woods, as I could with all the team I have, and yet have left enough to sustain a vigorous growth of timber. In this way alone, I have made annually from three to six hundred four ox loads of manure, of sufficient strength to make poor land produce respectable corn and wheat.

Where the woods are thick set with whortleberry bushes and other under growth, as it generally is in this part of Virginia, I think the horse rake would be rather more trouble than profit. I find that one hand with a hand rake can generally keep a cart supplied, and also aid the driver in loading, unless the distance the cart travels is very short. I have found it best to mix the pine leaves and oak together, though I have used them separately to an advantage. My usual plan is to haul in my corn stalks first; then cover with the oak leaves; and last with the pine leaves, (all of which I aim to get in January) so that when the whole is dug up with a dung hoe, they are very regularly mixed.

It is incredible to one who never tried it, how much manure can be made on a farm by *care-*

fully and *perseveringly* (aye, that's the word, *perseveringly*) collecting every substance that will make manure. I recollect some years ago to have seen an account published, in which it was stated, that a tumbril load of manure had been made from every hog fattened. I said when I read it, that I did not believe it; my opinion at that time being founded on the idea that an animal could only make so much manure and no more; but I have long since found out, that, it is not how much manure each animal ought to make, but how much each hand ought to make with the aid of the animals.

And now, Mr. Editor, I will tell you what effect the publishing of that account, named above, had on me. I went to work, sir, to test the truth of the statement, and found that not only a tumbril load could be made, but a great deal more! for since the last winter, I made three good loads from each hog fattened; (when I say a load I mean such a load as will cover a surface of twelve yards square well) and the growth of corn now shows that the quality was not inferior to any used for the present crop.

With the hope that this statement may induce some one to try it, I will give you the modus operandi, viz. about the first of October, I made my hog pen twenty-five yards long and four lengths of ordinary fence rails wide; which, allowing for the crook in the pannels, made it about ten yards wide; I then spent a day with two carts and four hands hauling pine tags into it; and after spreading them regularly, put in the hogs, who immediately set to work rooting and revelling in the trash, so that in a week or ten days, the trash was all reduced to fine manure. I then spent another day hauling in oak leaves, and so on hauling in alternately pine and oak, until a short time before the hogs were killed—making in all, about five days spent in hauling* in the litter, which made 120 loads of good manure. If any one doubts it, let him try it.

You will perceive, Mr. Editor, that my fingers are better adapted to hold the plough than the pen, but as I was disposed to indulge a little in the shade this warm day, and looking over the last number of your paper, I concluded I would make the above communication. If you think it, *or any part of it*, worth publishing, you may do so, if not, just throw it aside, and there will be no harm done. W. S. R.

P. S.—I have some idea of giving you my opinion of the root crop, especially as it differs from almost all those who have written on the subject. From the little experience I have had with them, I find them the most costly, and the most impoverishing crop, (especially turnips of all kinds) I have ever cultivated. W. S. R.

We shall be very much pleased to hear from our correspondent, at any time, and upon any subject he may choose, no matter how much his conclusions may differ from the popular doctrine. We are wedded to no set of opinions whatever. Our columns are open to free discussion, and any article, like the present, containing views, the result of actual experiment, will always find favor in our eyes.

* Some of the litter was hauled fully a mile.

BACON.

A Mr. John Lewis, formerly of Spottsylvania county, Virginia, writes to the Editor of the Cultivator upon the subject of curing bacon. His hailing place entitles Mr. Lewis, of whom it strikes us we have heard before, to speak with authority upon this subject.

Mr. Lewis's mode differs a little, we think, from that generally adopted in his native county. He uses a mixture of three parts salt and one part hickory ashes with which he rubs the skin and covers the fleshy side of his hams and shoulders to the depth of three-quarters of an inch. A pickle is thus formed in which the meat is suffered to lie from five to seven weeks, according to the size of the hogs. When it is taken out it is washed clean in lukewarm water, and after being permitted to drain and dry, is dipped into what he calls his *meat paint*. "The meat paint," he says, "is made of warm, not hot, water, and very fine ashes stirred together, till they are of the consistence of thick paint. When the pieces are dipped in this, they receive a coating, which protects them from the fly, prevents dripping, and tends to lessen all external injurious influences."

To preserve bacon, some external coating is necessary. We know of none cheaper or more convenient than Mr. Lewis's. The canvass bag, notwithstanding it costs a little more, we have been in the habit of using in preference to the thick white wash, which is somewhat similar to Mr. Lewis's meat paint. We should fear, however, that, after the evaporation of the water, the ashes would be left with very little tendency to adhere to the meat.

THE FILBERT.

We would commend the cultivation of this delightful nut to our gardeners in general; not by way of a "crop," as it is recommended in the northern papers, but for domestic use. Those, who have used only the imported nuts of the shops, can have but little idea of the sweetness and flavor of the freshly gathered filbert, grown in Virginia. We do not know any name for the variety we have been accustomed to see raised in this country, but know that it is smaller, thinner barked, and much more highly flavored than the imported article. The filbert is a hardy bush and a prolific yielder.

A Mr. Downing, in the "Magazine of Horticulture," recommends a soil naturally dry rather than moist, but a dry, gravelly loam, or

sandy loam, is preferable. The kinds preferred by Mr. Downing are the Cosford, the Frizzled, and Northampton Prolific. The avarage crop in England, we are informed, is about 800 lbs. to the acre.

Set out a few bushes. For a very trifling expense they will afford you "nuts to crack" during the whole winter.

THE DAHLIA.

The following mode of treating the roots of this gorgeous flower has been furnished the Cultivator by those experienced and distinguished florists, the Messrs. Prince, of Long Island. They say, "Our practice in wintering dahlias is exceedingly simple. As soon as the frost has killed the tops, we cut them off and take up the roots, and then dry them for two or three days in the sun, after which we place them on shelves in a cellar, perfectly dry and free from frost, where they remain until the period for spring planting. Moisture is destructive to them, and in a damp cellar or room they are liable to rot; but in a dry one, not a single one will be injured, if it is kept free from frost."

CATTLE.

In the present cut we have endeavored to kill two birds with one stone. We have thrown upon a native cow, on the commons of Richmond, an English martingale. The object of this contrivance is to prevent injury to the limbs of trees, when it may be found desirable to turn cattle into an orchard, or when they may be allowed to trim the grass in the yard.

The animal herself exhibits a specimen of what may be effected by attention to our native stock. Now, we ask our readers if it is not better, by careful selection and judicious crossing, to raise a stock, which will be acclimated, than to rely upon northern or western importations? When we consider the mysterious and fatal disease to which all imported cattle are subject in Eastern Virginia, we hazard the assertion, that home production is the only course to which we can ever look for permanent and valuable improvement in our stock of cattle. It seems to be a principle universally recognised, that cattle degenerate, with few exceptions, with a change of climate. Accordingly, every district in England has its particular stock, which is always the native acclimated stock improved by judicious breeding.

So valuable is acclimation, that the judicious breeder seldom discards the native stock, but builds upon it by selection and crossing. Poor as our stock of native cattle may appear, we are little aware how much of that appearance is owing to indifferent keep and bad management, or what improvement may be effected by a more judicous course.

We once knew a physician, in a country practice, with a fine eye for a cow, who, when he met with one that pleased his fancy, would purchase her for eight or ten dollars, and by judicious keep and management increase her milk from a quart to several gallons. She then became the wonder of the neighborhood, and was purchased by some less judicious gentleman at a high price. Another was soon procured in her stead, with the same result. Our physician, who was a man of great observation and judgment, and devoted to agricultural pursuits, often declared the conviction of his ability, if his professional engagements permitted, to raise from our native cattle a stock equal to any that could be imported.

The fact is, that for the producing a good stock of our own, the material is not so much

wanting in our cattle, for nature every where affords favorable specimens of her work, as information and discernment amongst our breeders. What avails it to advise the selection of the best individuals, if, ignorant of anatomy and of those points indicating the qualities you desire, you know not how to select.

Cattle are used for three purposes, as oxen, as producers of milk, or for the food they afford as beef. There are certain points of form giving activity and endurance to the ox, there are others indicating milking propensity in the cow, and there are others again denoting a tendency to convert food into fat. The marks of each are certain and easily to be understood by observation and study, but they no more come by nature than reading or writing.

We then advise our farmers to make themselves acquainted with these points of form, by resorting to the best works and obtaining the best advice they can procure upon the subject. Let them select a certain number of our native cattle, according to the information they shall obtain, and keeping them in the best manner, let them select from their offspring those individuals as breeders having the points they have learned to esteem. Every year they will find the produce coming nearer their beau ideal of perfection, and they may very soon venture to confer upon their stock a high sounding name which will be all that is wanting to enable them to rival the "imported."

ARTIFICIAL SPRINGS.

It is stated in the Cultivator, upon what seems to be good authoriy, that water may be obtained in the dryest ground, by the following procees: Dig a hole, and insert a common barrel; pack the earth closely around the barrel, and fill it with pebble stones. The water will soon rise and continue to flow over the top of the barrel.

The author attempts to explain it upon the principle which produces ordinary springs, but we would prefer being satisfied of the fact before we enter upon the rationale. Will some of our subscribers try this mode of furnishing their dry fields with a continued supply of water, and inform us of the result?

SCOURS.

The following treatment of this disease, which is so common amongst the colts of the stock grower, is recommended by a Mr. Mentelle, in the Kentucky Farmer. We know nothing of Mr. Mentelle, but our own experience confirms the value of his general course of treatment.

"As soon as the disease is evident, the mare and colt must be taken from the pasture if they were at grass, and their treatment must be different, according to the degree of appetite retained by the colt; if he eats or sucks heartily, give him cow's milk boiled with a little flour, and with warm injections of mullein, flax-seed tea, or slippery elm; if, on the contrary, the animal is without appetite, it is a sign that the evacuation is dangerous, and ought to be checked; give something more than a quarter of an ounce of assafœtida diluted in one of the above teas, which he must be made to swallow milk warm; besides which, he must have injections morning and evening until the disease seems to be checked, then suppress the evening remedies, and suppress them entirely, as soon as the colt is evidently better. It is more prudent to keep the mare out of pasture, and feed her on dry hay, &c. A careful attendant on the colt, will best know whether to continue the remedies or not. Mind that the mother's milk has a great influence on the colt."

FRUIT TREES.

Draining, which is necessary to the proper cultivation of every species of vegetable, has been found particularly beneficial to the growth of fruit trees.

From the Boston Cultivator, we see that a Mr. Chinney, of that State, of great agricultural reputation, has found by experience that the water in a retentive sub soil was so injurious to the growth of his trees, as to justify the expense of ditches cut from two to three feet deep to carry off the surplus water, which, collecting in the loose earth, destroyed the tender roots. At the bottom of these ditches is left a water course of about eight inches covered with flat stones; on these brush and briers are thrown, and the whole filled in with the earth thrown in from the ditches.

By pursuing this method, Mr. Chinney has secured the most entire success upon ground, when all his attempts to rear an orchard had failed before.

HAY.

We extract the following sensible remarks from a treatise on hay making, published by Mr. S. W. Jewett in the Northern Light.

Hay making is one of the most essential theories in agriculture, and perhaps one where the practical operation of profit and loss is as much varied as any one process in farming.

With regard to the mowing of grass, in general, for hay, the workmen should be made to cut as low as possible, by which the crop is increased: if it be wet by dew or rain, hands should be ready to shake it out immediately after the scythe. As soon as the external wet is dried off, it should be raked and secured into cocks of seventy-five or one hundred pounds.

It may be proper here to remark, that the hard hay of a poor soil is little subject to heating, which often occurs with that on rich soil made of succulent herbage. The latter therefore requires longer time for its making.

To preserve as much of the sap of grass as possible without increasing the danger of firing, is, in my view, the grand practical problem of hay making. To effect this, grass should be put immediately into small hay cocks about four feet high; not by rolling, but by laying one fork full upon another, and of as small a diameter at the base as they can be made to stand with, giving each of them a slight kind of thatching, by drawing a few hands full of the hay from the bottom of the cock all around, and laying it lightly upon the top with one of the ends hanging downwards. This is done with the utmost ease and expedition; and when once in that state, the hay is in a great measure out of danger; for unless a violent wind should arise immediately after the cocks are put up, nothing else can hurt the hay; as no rain however violent can penetrate these cocks but for a very little way; and if they are put up dry they never lie together so closely as to heat, although they acquire in a day or two such a degree of firmness as to be in no danger of being afterwards overturned by wind unless it blows a hurricane.

If there should come rain upon the cocks many times, it will be proper to give them an airing before they are removed to the barn; and more especially that portion which comes in contact with the ground. In such cases the first drying wind, or fair day, lay them over into tramp cocks, by placing the top of the cock on the ground and putting two or more together; in this way the hay is secured until the maker wishes to remove it to the stack, yard or barn.

Clover hay should remain longer in the cock than other grasses, that all the larger stems may undergo their proper fermentation. Hay cured in this manner being rather heavy at the time of its removal to the mow, the process is every year condemned by our laborers; but we find no hay that opens more bright and sweet than that which is cured in this manner.

The old mode in which I was first educated to make hay, by spreading and turning, is not only more expensive in curing, but the value of the hay is lessened at least one-third.

Where the grass is matured and thin, the weather being good, it may be only the business of a day; but this cannot be the case with a heavy burden or early mown hay; the grass being cut when full of juices, the succulent stalks require time as well as sunshine to part with their moisture. When spread and exposed to the hot sun, the leaves and exterior parts soon dry, but the interior parts of the larger growth are not divested of their moisture. If housed in this stage of the curing process, it is sure to undergo, in the evaporation, an overheating in the mow; or if it is exposed to dry by the effects of wind and sun so thoroughly as to prevent any after damage, then the leaves and blossoms which constitute the best parts of the hay are over dried, crumble, and are lost.

It is asserted by distillers of plants, that to procure the most oil, they must not be dried in the sun, as it not only lessens the quantity of oil, but also diminishes the flavor. When the plants are allowed to uudergo a severe fermentation by being packed in heaps so as to heat, it diminishes the oil, sugar, or mucilage, also; which properties are the life-giving essentials to all the animal creation.

Most plants produce more oil when distilled full in the blow: clover should be cut in this stage; this hay is eagerly devoured by stock, and affords the most nutriment if well cured at this period, as above advised, but cattle reject it, and would nearly starve rather than to eat coarse clover that has been whitened out in the sun.

Herds-grass or timothy should be cut when nearly ripe, as the latter math and seed adds to the value of the crop; red-top may be the last hay-grass that is to be cut, as it grows in moist lands.

On our clay soils, where both timothy and clover abound, if the first part of the season be dry, and the middle and latter season be wet, it is better for the mixed crop to stand a greater length of time; because the after math may gain more by standing than the first crop will lose by seasonably cutting.

I generally let the grass ripen, that some seed may fall every other year to the ground, to prevent a degeneration, and to keep the land well stocked. To effect this, we reverse our mowing by cutting first this season the field which was the last to receive the scythe last year.

We also use as little salt as possible at the time of putting up our hay: the best time and method of feeding salt to stock in winter, is to brine the hay in the more mild or warmest days, when the stock have the least appetite; in this way we find a ready market for our poorest hay, as sheep and cattle will devour it with avidity if well brined. I am of the opinion that salt is not good but injurious to stock, if they are obliged to take much of it in cold weahter. By brining the hay, say one quart of salt to five of water, for one hundred sheep, once or twice a week or less, every warm spell, it will increase their appetite and digestion, and is a preventive against the scours in sheep, and other cattle; hay also when cured in the cock is not as liable to produce the above disease as it is when half cured in the sun, and then mow burned.

I was greatly prejudiced against the horse rake, until I was frequently advised by other judicious farmers to give it a trial. We soon found it equal to two extra hands in collecting hay, to say nothing about the greater profit in avoiding the exposure to rains.

Where the grass is heavy, wet, or quite green, we follow the scythe, and spread the grass, as

soon as partially wilted. We rake first one way with a revolving horse rake; sufficient help follows with forks to put it into cocks; then the ground is all cross raked, and by this process a field of eight or ten acres may be secured in a short time. We thus gather it up as clean as it would be if raked by hand. Thus by laying prejudice aside (by the way, farmers are apt to have too much of it,) long enough to give it a fair trial, we have been the gainer full ten fold.

PAINT.

To the Editor of the Southern Planter:

My Dear Sir,—Circumstances have compelled me to travel a good deal lately, both at the north and the south, amongst the neat cottages of Massachusetts, and the desolate dwellings of Virginia. As a southerner my pride has been mortified at the contrast. Why is it that the dwellings of the poor in our native State lack all those outward appearances of decency and comfort that are attainable even by the poorest? In Virginia, the eye of the traveller is now and then greeted with the view of a splendid mansion belonging to some extensive landed proprietor, but the general appearance of the homestead is that of desolation and of waste. Most especially, is there a general lack of the cheerful influence of PAINT. An excellent dwelling with a good enclosure may be frequently seen disfigured with the sombre and gloomy rust of time.

Struck forcibly with these facts during a long day's travel in Eastern Virginia, the impression of universal gloom was deepened by the appearance of the little inn at which I sought repose on a sultry evening in the month of July. The proprietor was a man of substance and well inclined to indulge himself and his guests in the good things of this life, but the whole establishment, in its outward appearance, exhibited a want of those little ornaments and arrangements of herb and flower, that give to the dwelling of taste its peculiar charm. Most of all, there was a total lack of paint—every thing was dingy and dark. I could not help thinking what a different appearance might be given to the whole establishment by a few hours use of the paint brush. I pictured to myself the surprise of the proprietor upon the following morning, if, taking advantage of the light of the moon, some kind friend should spend the hours of the night in giving a new coat to his houses and enclosures. I doubted if he would know his own premises, and whether, rubbing his eyes, he would not imagine that by some Aladdin's lamp he had been transported during his sleep to Fairy land.

Such a course of reflections probably influenced my sleeping thoughts, for, during the night, I fancied myself a mighty painter, a profession to which I have been fondly devoted; but, instead of painting mimic scenes with Claude Lorraine upon a piece of pitiful canvass, I imagined, that striking out a new and nobler walk of art, I was, pot in hand, travelling about the country beautifying and adorning the face of nature, painting every dwelling, out house, and enclosure in old Virginia. I never enjoyed more exquisite delight than was afforded by a contemplation of the improved appearance of the country, which seemed to me to be stretched out as in a map before me. I could mark my course, as, with wonderful celerity, I proceeded with my mighty brush from county to county, rendering that which was dark and gloomy bright and cheerful, brushing off, as it were, at one grand flourish the dark cloud that rested upon an extensive tract of country. I could see the smiling countenances of the inhabitants, rejoicing in the new beauty of their homes, and greeting the great painter as a public benefactor.

But probably from a change of position, a change came o'er the spirit of my dream—brush, brush, brush, and no effect. The impenetrable gloom resisted all my efforts, and amidst the groans and execrations of the disappointed multitude I found that my paint pot had been exhausted. At last my brush stuck fast, and was itself immoveable, and I awoke from my impotent efforts to find myself grasping the bed post, with which I had been trying to revolutionize the world.

The glorious vision of the night afforded me food for thought during the next day's ride, and as I have been long considering what disposition to make of my means, which are ample, I have resolved to bequeath an hundred thousand dollars to the painting up of my native State.

Yours, A TRAVELLER.

We are well acquainted with the eccentric writer of the above, and have little doubt of his carrying his resolve into execution; for he is a confirmed bachelor, and fully able to do what he proposes.

But he is also stout and hearty, as bachelors generally are; we would, therefore, advise our friends not to wait for his death, but proceed immediately to act upon his hint. Amongst the farmers of the north, the most managing and saving people on the face of the earth, paint is universally resorted to as a point of economy, and no judicious manager will fail to use it upon every article of wood that is exposed to the weather. Its preservative qualities are worth generally ten times its cost. The mixing and application are simple processes, although many are not aware of it. We design hereafter to give some plain and simple directions upon these points, conceiving that we can in no manner be more useful to the public than by leading to the more general use of this valuable article.

For the Southern Planter.

SLAVERY.

Mr. Editor,—Notwithstanding your objection to the introduction of exciting and agitating topics in your agricultural periodical, I hope you will not refuse a place in your columns to the

following views on SLAVERY. However in its political aspect it may form a subject of discussion between the north and south, there can be but one opinion upon those exciting points among the southern people, to whom, I presume, your circulation is chiefly limited. I do not propose, therefore, to discuss this point in its political bearings, both because you very properly reject such discussions, and because upon those points your readers and myself are no doubt perfectly agreed. But, the subject is also intimately connected with the agriculture of our country, and it is in this point of view that I design to offer you the opinions of a very humble but devoted friend of the south.

Many errors prevail, I am satisfied, amongst the southern people themselves upon this important subject. There is one, particularly, common to the north and the south, that I am especially anxious to refute; which is, that *white is more economical than slave labor*. This, I am satisfied, has lead to much emigration to free States, as much to the disappointment and regret of the emigrants themselves as to the injury of their native State. No opinion, it seems to me, can be more ridiculous and absurd. What is it that makes labor dear or cheap? It is certainly the expense of maintaining and supporting that labor; and will it be contended that the negro of the south lives more expensively than the white laborer of the north? Is his food better, his raiment more costly, or his dwelling more expensive? But it is urged that a white man will do more work than a negro. Is this a fact? In a southern climate we know it to be untrue, and in any climate I believe the assertion is unfounded. Indeed we are charged, in one breath, with working our slaves to death, and in the next, it is asserted that the labor is most expensive, because less work is obtained from them.

The truth is, man, neither black nor white, works, but from compulsion. This compulsion is more readily and fully applied to the black than the white laborer, and consequently, more work is obtained from the former than the latter. Moreover, this class, I mean the operatives on the soil, especially under the burning influence of a southern sun, must always be of the most degraded class, requiring a degree of restraint for their subordination incompatible with that freedom to which beings more elevated in the scale of humanity are entitled. Nature, as if with this design, has dressed the African in a livery, which enables us to make him the subject of peculiar legislation. This, with the white man, although it might be equally required, it is utterly impossible to effect. Hence, we have a class to perform our menial offices in a perfect state of subordination, clothed and fed at the least possible expense.

And let us not forget the advantages to be derived from the fact that our menials are in a state of perfect subordination. I mean advantages in a pecuniary point of view. Every man who superintends the labor of others knows the advantage of system and a division of labor—how perfectly these principles may be carried out in the case of the slave, who is the continued and absolute property of his master, must be apparent to the most casual observer. When he is once instructed in his particular department, he is not to be exchanged, like the white man, at a particular period for a new hand, who is again to be instructed, but he continues to revolve in the circle, which practice has made to him both easy and agreeable.

To assert that the negro's understanding is incompetent to the discharge of the ordinary work upon a farm is to assert what our experience proves to be untrue—he is as intellectual as the white man, who has received no more instruction, and there are thousands of white operatives in Europe and probably in the factories of this country equally as ignorant as our negroes. They are found sufficient for the management of much more difficult operations than any required of our ordinary farm hands. We know that, with proper attention, they make excellent mechanics, and, with proper instruction, they are perfectly capable of performing the simple operations of agriculture.

How is it then, it is asked, that a laborer does more work at the north than at the south? Why is the northern man thrifty and independent, whilst the southern cultivator is generally hard run and behind-hand? Is not this attributable to the blighting influence of slavery? I answer, no; the fact, if it be so, is attributable to the habits of the master rather than to any inherent property in the servant. In fact, the master makes the servant. And under the control of the lazy, indolent and extravagant planter of the south, the active laborer of the north, freed from the constant vigilance of his master's eye, would degenerate into the careless and slothful servant of the south. Indeed, we see this effect produced universally upon the emigrant of the north. No matter what his degree or condition, he sinks into tropical sloth and southern extravagance.

Notwithstanding the drawbacks proceeding from the enervation of climate, and the still more objectionable habits of waste and extravagance engendered by our peculiar circumstances, so favorable is our climate, and so well adapted to it is our negro labor, that we are, and ever must be the great unrivalled agricultural producers of this continent. The agriculturist of the south does not *make less* than the farmer of the north, but he *spends more;* and that is the only reason that he is not so thrifty and independent. He has it in his power to be so with half the labor.

My object in this essay, Mr. Editor, is to disprove the *injurious* supposition that the existence of slavery is obnoxious to pecuniary prosperity.

Injurious I term it, as well as erroneous, because, I believe that with many it has lead to dissatisfaction and emigration. I am desirous too that my countrymen should be aroused to, and grateful for, the benefits they enjoy, and the greatest amongst these, I believe to be, the possession of a slave population.

Let him who is about to remove to a free State to get rid of the incubus of slaves, which he asserts has kept him down, let him re-consider the matter, and put the saddle upon the right horse. Upon trial, he will find, as thousands have done before him, that, if he carries his idle and careless habits into a free State, he will miss very much the retainers, who were not the cause of those habits, but the means of his support, in spite of them. The habits of idleness and extravagance, which exist at the south, may be traced to other causes, independent of the institution of slavery: or if this system is instrumental in producing them, it is by the facilities which it affords to the acquisition of wealth.

Not only for agricultural but for manufacturing purposes, negro labor has been found to be the most economical and advantageous that can be had.

So much, sir, for the pecuniary considerations upon this subject. There are other lights in which it may be viewed as affecting our agriculture, which I will perhaps make the subjects of some future numbers.

Yours, J. S.

IRON HOUSES.

Iron seems to be gradually usurping the place of timber as the latter becomes more scarce. It has long been used for door and window frames, with great advantage. The hulls of boats and the roofs of houses are frequently made of iron. The front of the Miner's Bank at Pottsville, Pa. is entirely iron, and is represented as very beautiful. A church is now in the course of erection at Liverpool, made, as far as practicable, of cast iron, and a gentleman of Brussels has lately constructed an iron house, said to answer the objects intended in a satisfactory manner. The walls are hollow and the hot air circulates from a central point in the kitchen through the intervals in the walls, and by means of valves, the quantity to be admitted may be regulated.

The expense there is said to be no greater than if brick were used. The advantages, over and above the beauty of the structure, are represented to be its permanent nature and the facility with which it may be moved.

From the Western Farmer.

MEDIUM SIZED *versus* LARGE HOGS.

Mr. Editor,—You are aware that I am now, and have been ever since 1820, extensively engaged in pork-packing in this city; and I feel that I may without presumption, lay claim to not a little experience in the business. It is fully as much to my interest, and that of every one else engaged in curing pork for market, as to the interest of the farmer, that the very best breeds of hogs should be scattered over the country.

When I first entered into it, the pork brought to us, was produced from the same miserable race yet to be found through much the greater part of the west. It yielded us little lard, and the sides were unfit for mess or clear pork—too thin and only fit for bacon. The first improvement we had was the little chunky China hog—a perfect mass of lard—hams light and too fat—though the waste of offal was trifling. The next we had was the large Warren county hog, requiring years to mature, and then coming to us of an enormous weight—great waste of offal—the hams too large and badly shaped, as was also the shoulder—and the sides, nevertheless of their great size, were thin in proportion. They were still a great improvement. The crosses of these and the Russia and Byfield, in the hands of some of the more judicious breeders, produced a very excellent hog—and we who were the purchasers, were anxious for any improvement on the unprofitable woods-hog usually raised.

Though as I have remarked, so long engaged in the business of packing, I had paid but little attention to the breeding of hogs, though always keeping a few of the best I could find on my farm, and improving them to the best of my ability. It was not until some of the part-bred Berkshires were brought to us from Butler and Warren counties, that I was struck with the great improvement they were on any thing I had yet seen. The perfect manner in which they were fattened—their extraordinary length of body, and the thickness of the side meat—their small, yet thick, fleshy shoulder—the great weight and handsome form of their hams—the great yield of lard, and little waste of offal, either of inside waste, or head and bone, proved to me that they were a something entirely different and altogether superior to any other breed within my knowledge. On making further inquiry respecting them, I found them equally advantageous to the farmer and drover, as to the pork packer. Prolific and easily kept; maturing early and fattening kindly to as great weights as were desirable; stamping their own character strongly on any other breed with which they might be crossed; and travelling well to any reasonably distant market.

I had before this been breeding hogs for sale, and seeing at a glance, the great advantage it was going to be to me in my packing business, to have such a hog as the Berkshire in general use, I at once engaged in it largely.

True it is that I cannot give up my farm, and my attention and capital, to the breeding of fine stock, without a prospect of money-making by

it; but that was the secondary object I had in view—my pork-packing business was of the first importance to me. I saw and dreaded the efforts that were made to introduce an extremely large hog into Kentucky, for I had about this time transferred my pork business to that State, and had gone to very great expense in erecting an extensive establishment back of Covington, and intended making my entire purchases in the State. We can make no use in this market, of animals weighing from 400 to 600 lbs. even though they may be well fattened. A hog of the proper form and quality of meat, that matures at ten or twelve months old, so as to fatten properly, and then weighs from 200 to 300 lbs. is the sort for which we will give the highest price, because it yields us the greatest profit. And most assuredly it will also pay the farmer best. We have no population to supply, that will consume large, coarse, indifferently cured meat. Our principal demand is for city and family use, both here and in the cities of the south and east. The ham is with us the most valuable part of the hog, and the celebrity of those cured in Cincinnati is now great. This part must be heavy without being large—round, thick and plump; the flesh, though principally lean, yet marbled with fat. Next to the ham the lard and side meat yield us the greatest return—the former must be abundant in quantity, and fine grained; which never is the case with any hog until he has somewhat matured—the latter must carry its thickness throughout, having no thin flanky parts; and must be fat—and last we rank the shoulder and the jowl.

Many of the Boston and Richmond dealers, and those from the other cities in the east and south, come here annually to have meat packed—they all prefer such a hog as I have described, and will buy no other if they can help it. How the drovers, who are represented as driving to Richmond and Charleston, and as preferring the largest sized hogs, can possibly dispose of such animals there, I cannot understand. Nor how meat of a size that I know from experience, cannot be cured, even with the aid of cool cellars *here*, can be kept *there*, surprises me. Think of a pair of hams, Mr. Editor, weighing 148 lbs. in the climate of Charleston, or Richmond, or Baltimore! They would indeed require to be cut in two—and then what a sightly object!

Still some regions of country *may* require a larger hog than others; and to supply those who may think so, Mr. A. B. Allen, now on his way to England, will import for me some of a size sufficient to suit any taste. For my own part, and for my use for packing, I want neither an extravagantly large hog, nor yet a very small one. A hog that has to be fed two winters, never will pay first cost; if he can be had of sufficient size without wintering at all, so much the more profit—a spring pig killed in the fall at 200 lbs. nett, will evidently pay better than if the same hog had been kept over winter, and reached the second fall 500 lbs. nett.

I have been speaking now as a pork packer, not as a breeder; and what I have said, I say in all sincerity. I have no desire to injure the business of any other breeder of improved hogs, nor to prevent their continuing their improvements to as high a point as they please. But I do regret to see gentlemen of science and experience going back to a large, coarse hog, such as the Woburn, Irish grazier, or Leicester, when they can procure a breed so infinitely superior—the *improved Berkshire*.

JOHN MAHARD, JR.

Cincinnati, July 5, 1841.

We think that our most judicious farmers concur entirely with Mr. Mahard in preferring a moderate sized hog. Indeed, over size is an objection we have often heard here urged against the Berkshires themselves. Mr. Mahard has been totally misinformed in the fact that large hogs could be sold in this market. Our packers never like a hog to exceed two hundred, and hams are preferred weighing about ten pounds; above that weight the price declines a cent or two in the pound, and beyond fifteen, they are unsaleable.

If it is a fact, which we do not doubt, that a certain age is necessary to impart maturity, it will always be an objection here to any hog that the food, which is necessary to keep him in good health and condition, will cause him to weigh more than 150 or 200 lbs. within that period. On the contrary, the stock, that attains that weight at maturity with least food, will always be preferred.

For the Southern Planter.

MR. C. T. BOTTS:

Dear Sir,—While I acknowledge the sincere pleasure which I have derived from the perusal of your valuable paper, I must confess that I have felt some little disappointment in looking over your rich table of contents to find no communication upon one branch of agriculture of great interest to me personally, and of general interest to the farmers of our country. I allude to the subject of hay-making. Having recently purchased an estate which is believed to be peculiarly adapted to the growth of hay, I wish to enter upon its cultivation, and having no experience on the subject, I had hoped to avail myself of the experience of others through your valuable paper. Can you not, Mr. Editor, induce some one of your practical hay-making acquaintance to write a communication on this subject for your next number? Or, should you fail to get a written communication, can't you avail yourself of your *squeezing* process and extract the desired information by verbal inquiry? As "brevity is the soul of wit," and your paper is designed as a machine for condensing agricultural knowledge, the latter perhaps would be the better plan. In order to assist you in the process, I will suggest a few specific queries, in which I

feel an especial interest, and you can enlarge or extend them as you may think proper.

1st. What is the best period of the year for seeding herds-grass on meadow or bottom land?

2d. What quantity of seed will be required per acre?

3d. What is the most approved method of sowing, by hand, by perforated tin cylinder, or other machine?

4th. What is the best method of covering the seed, by roller or by harrow?

5th. Is it important to cleanse the land by a corn crop, or will it not yield (like wheat) a heavier crop when seeded upon a summer or fall fallow?

6th. When it is desirable to break up old meadows what is the proper time for doing so?

7th. When an old herds-grass meadow is broken up, and neatly harrowed and rolled in August or September, will it be necessary to reseed it, or will not the seed on the land come up and be sufficient to afford a thick crop?

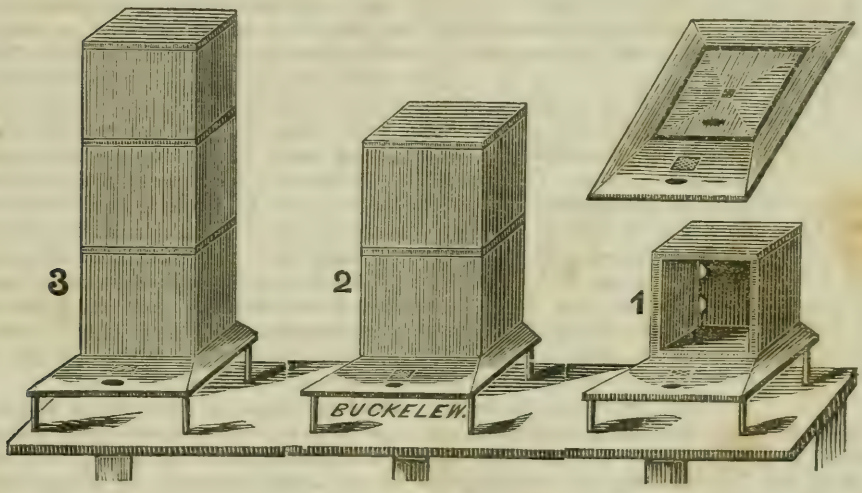
As I have communicated nothing of interest to your readers, but only ask for information, I do not expect you to publish my letter, but hope that you will be enabled through some *practical* farmer among your acquaintances to obtain the information desired in time for your August number.

Yours, respectfully, J. R. G.

Henrico, July 24, 1841.

Dr. G.'s communication was not received in time to enable us to comply with his request in this number. We have therefore taken the liberty of inserting the letter, with a request that some of our hay-makers will afford him the information he desires through the September number. For this purpose the article must be received by, at least, the first of that month. The subject is exciting great interest, and Dr. G. is not alone in his inquiries.

SUBTENDED HIVE.



We have here a cut of a newly invented, and highly approved bee-hive. It is taken from a little work published by Mr. Thomas Affleck, of Cincinnati, alluded to in our last. We promised then a further notice of this little treatise highly recommended to us by a connoisseur. Since reading it, we do not hesitate to bear our own testimony to its value. Although not deeply learned in the subject, we venture to say that Mr. Affleck's work is philosophical and replete with curious and useful information.

His plan of hive purports to be founded upon the observation of two facts in the natural history of the bee not generally regarded. The one, their universal inclination to build downwards, and the other, that the honey does not acquire its full flavor, nor can it be removed without injury, the same season it is made.

We know not why every farmer should not grace his table with this delicious food of his own making. Mr. Affleck demonstrates that it may be made extremely profitable, and we doubt not that there are many families, who, by means of his little work, alone, might make a good business of it. But this and many other little luxuries ought to be had by every farmer without purchase. "Many mickles make a muckle," is a Scotch proverb well worth remembering. Over and above the saving, these luxuries are always much better, or at least they seem so, when they are of one's own raising. With what an air of pride the good housewife places upon

her morning table a plate of nice delicious honey, and with what honest satisfaction she replies to your compliment, "it was made at home." What a word that is! Husband, children, guest, and all, think it a thousand times better for being made at *home*.

They esteem it a thousand fold for the valued hands through which it has passed, and an entire confidence in the neatness of its management gives a flavor which nothing else can impart.

Attention to such things is rather a recreation than a labor, and serves well to relieve the severer toils of a farmer's life.

Mr. Affleck considers the bee moth as the great and only difficulty to be encountered in honey making. The ravages of this little insect are to be prevented only by great attention, the amount of which is lessened by his particular construction of hive.

This hive we shall now proceed to describe in Mr. Affleck's own words. We shall make frequent use of his work hereafter, every word of which might well be copied into any agricultural paper:

"It is a simple and economical plan; of easy management; and one within the means of any farmer who can handle a saw, a plane, and a hammer.

"The boxes of which it is composed, are formed of good, well-seasoned pine plank—if possible, free from knots and wind-shakes. It ought to be at least one inch thick. The boxes may be ten, eleven, or twelve inches square, in the clear. Let the plank be dressed on each side, and jointed on the edges, so as to fit close, without being tongued and grooved. Before nailing them together at the sides, lay a thin strip of thick white lead paint on the edge to be nailed, which will render it impervious to the ovipositor of the moth. In the top cut two semicircular holes at the front, and two at the back, of one inch and a half in diameter—the straight side being in a line with the back and front of the box, so that the bees may have a straight road in their way from one story to the other. Put the top on without any layer of paint, using eight stout screw nails, that it may be taken off to facilitate the removal of the honey. Give the outside of the box two coats of white lead paint, all except the top; and let it be done so long before it is necessary to use it, as that the smell may be dissipated, as it is very offensive to the bees. Pour a little melted bees-wax, while pretty hot, over the inside of the top, which will enable the bees to attach their comb much more firmly. Let three-quarters of an inch of the thickness of the lower edges of the box in the inside be bevelled off, so as to leave but about one-fourth of an inch of surface to rest upon the stand—this will afford less shelter for the eggs of the moth.

"We will suppose the boxes, thus made, to be a cube of twelve inches inside. In that case, the tunnel stand will be made thus:—Take a piece of two inch pine plank, free from knots and shakes—what carpenters term *clear stuff;* length twenty-six, and breadth eighteen inches. Ten inches from one end, and two from the other and from each side, is marked a square of fourteen inches. From the outside of this square, the board is dressed off, with an even slope, until its thickness at the front edge is reduced to half an inch, and at the other three edges to about an inch. The square is then reduced to twelve inches, in the centre of which is bored an inch auger hole; to this hole, the inner square is also gradually sloped to the depth of an inch; thus securing the bees from any possibility of wet lodging about their hive, and affording them free ventilation. There will then be a level, smooth strip of one inch in width, surrounding the square of twelve inches, on which to set the box or hive. Two inches from the front edge of the stand, commence cutting a channel two inches in width, and of such a depth as to carry it out, on an even slope, half way between the inner edge of the hive, and the ventilating hole in the centre. Over this, fit in a strip of wood as neatly as possible, dressing it down even with the slope of the stand, so as to leave a tunnel two inches in width by a quarter of an inch in depth. Under the centre hole, and over the outlet of the tunnel, hang small wire grates, the one to prevent the entrance of other insects; and the other to be thrown back to permit the exit of the bees, or fastened down to keep them at home in clear, sun-shining days in winter. For feet to the stand, use four or five inch screw-nails, screwed in, from below, far enough to be firm. The lower side ought also to be planed smooth; and the whole should have two coats of white paint some time before it is wanted."

No. 1 represents the box turned over on the side, so as to give us an inside view; and above it is a representation of the stand upon which it is placed, bevilled inwards and outwards as described in the directions for making.

The swarm is to be hived in the spring in No. 1. In ten days, it will be found, generally, that this apartment is filled with comb; in which case, a second must be added, by an assistant who lifts the one in which the bees are, and another, after carefully sweeping off the stand with a little broom, slips the other one under the first, presenting the appearance of No. 2. This process is at the proper time, repeated with the third box, when the whole presents the appearance of No. 3. The top of No. 1 is now unscrewed and the honey withdrawn.

CORN-COB MEAL.

Sir,—As the question of the value of the cob in feeding, when ground with the corn, is again

coming into consideration, perhaps the following extract from 'Steward's Stable Economy' might go far to decide it, in the minds especially of those who know that the cob is equal in *quantity* to the corn—the only consideration which is necessary in the present stage of the question: on some future occasion, it may be shown that the cob itself is fully equal in *quality* to the same quantity of oats for this purpose.

"*Condensed food* is necessary for fast working horses; their food must be in less compass than that of the farm or cart-horse, but to this condensation there are limits. Grain affords all, and more than all, the nutriment a horse is capable of consuming, even under the most extraordinary exertion; his stomach and bowels can hold more than they are able to digest; something more than *nutriment* is therefore wanted, for the bowels must suffer a moderate degree of distension, more than a wholesome allowance of grain can produce; they are very capacious; in the dead subject more than thirty gallons of water can be put into them; and it is thence evident they were not intended for food in a very condensed form, for it seems natural that they require a moderate degree of pressure or dilation to assist these functions, they must have something to act upon. Now, when hay is very dear and grain cheap, it is customary in many stables to give less than the usual allowance of hay and corn, but the alteration is sometimes carried too far, and is often made too suddenly: the horses may have as much as they will eat, yet it does not suffice without fodder, and, having no hay, they will leave the grain to eat the litter: a craving sensation of emptiness seems to arise, and the horse endeavors to relieve it by eating straw. The sensation cannot be that of hunger, else the horse would devour his corn; but whilst he has plenty of grain and plenty of litter, the diminished allowance of hay is borne with impunity. But when a sufficiency is not obtained in *any* shape, the horse loses appetite and becomes emaciated; his bowels are confined, his flank is tucked up, and his belly almost disappears; in general he drinks little water, and when he takes much he is apt to purge. His belly is often rumbling, the bowels apparently containing a large quantity of air, which occasionally produces colicky pains; these horses are very liable to crib-biting and wind-sucking, and it is certain that these diseases are very rare amongst those that live on bulky food.

When the ordinary fodder is very dear, its place must, therefore, be supplied by some other, which will produce a wholesome distension of the stomach, although it may not yield so much nutriment: straw, roots, either or both, may be used in such cases; the tucked up flank, and the horse's repeated efforts to eat his litter, show that his food is not of sufficient *bulk* to sustain nature in her operations. And when *work* demands the use of condensed food in a horse that has been accustomed for some time to bulkier articles, the change must be made by degrees and with the greatest caution; remembering, that coming from grass or the straw-yard, the horse for a time, requires more fodder than would be proper or necessary to allow him at his work, after a season."

Now, it would appear that the cob, ground with corn would be just the proper quantity of fodder for mixing with the corn, the condensed food, for almost all purposes; and nothing, surely, can be mingled with it more readily and conveniently, or so profitably as the cob, which, at the same time, saves the expense of shelling. When, therefore, the philosophy of the arrangement comes better to be understood, we may expect that to grind the cob with the corn will be the general practice, for the feeding of stock of all descriptions.—*Farmers' Gazette.*

For the Southern Planter.

TOBACCO.

In the June number of the Planter I commenced an essay on the culture of tobacco, which I will now resume.

The crop being planted and replanted until a growing plant is in every hill, it is necessary that the land should be frequently stirred and kept clear of grass and weeds in the early stage of their growth; a little earth drawn to them with the hoes at each working, and the worms caught and destroyed. The worms do but little injury before harvest, and generally are most numerous about the full moon in August.

When the tobacco is large enough to top, the bottom leaves should be removed about six inches up the stalk; (this is called priming,) eight leaves suffered to remain, and the bud and top leaves pinched off. I prefer eight leaves as the plant will be richer and ripen earlier; and late tobacco, such as is not large enough to top before September, six leaves; and late in that month, four leaves are as many as will probably ripen before frost. The sooner it is topped when large enough the better, and this is the case when it can be primed as above directed, and the bud removed without injury to the top leaves.

Tobacco should be thoroughly ripe before it is cut. For unless it be completely ripe, it will be necessarily poor, and will cure of a bad color; and planters, even those accustomed to making the crops oftener err in cutting it before it is ripe, than any other part of the management of the crop. When the plant is ripe, the leaves have a smooth, oily appearance, the ends of them will either fall to the ground or curve under the plant, and are thick and brittle. The top leaf on the north side of the plant is the last to ripen, and when the oil has reached the end of it, having the above described appearance, it may be safely cut; but it is always better, unless frost is ap-

prehended, to err on the safe side, and not cut the tobacco until it is positively certain that the plant is perfectly ripe.

In warm weather tobacco will generally be ready for firing in three or four days, in cool, perhaps eight or ten will be required—this can be easily ascertained by an examination; for when a majority of the leaves are piebald, that is, about half green and the other half yellow, and a peculiar sweet scent is exhaled, it is then ready for firing. Before tobacco is cut it is advisable to erect scaffolds in convenient parts of the field, where carts can reach them without difficulty, or near the tobacco house; and when cut, great care must be bestowed to prevent it from being scorched by the sun, or bruised by handling. If large, eight plants are enough to hang on each stick, and more in proportion if smaller, according to size: the tobacco is then removed to the scaffolds and the sticks placed side by side as near as can be conveniently done, until ready for firing; or rainy weather should require it to be moved earlier to the house; for the longer the time it can reman on the scaffolds, until ready for firing the better, so that the sun may strike the stems and stalks and cause them to cure with less fire; yet it is more important that after it has commenced yellowing that it be not drenched with rain.

Tobacco houses are generally built of poles. Twenty feet square on the inside of the house is considered the best size; and from three to four tiers below joists the best height. When the house is raised about nine feet high, tier poles are put across four feet apart; and when about three and a half feet higher, another series of tier poles; and so on, until the required number of tiers are put up; the roof is then framed with cross pieces the same distance apart, nailed to the rafters on each side, so that the roof of the house may be also filled with tobacco, and the chinks between the poles are filled with timber and daubed with mud. A cellar from three to four feet deep is very advantageous, if the location be suitable for the purpose; as it makes another tier, adds greatly to the safety of the house whilst the tobacco is firing, and the heat not being scattered by the air, takes better effect above.

The sticks of tobacco when placed in the house, should be (if the tobacco be large) from eight to nine inches apart, and if small, seven or eight inches, as this will leave a space between the sticks for the heat to ascend and cure the tobacco above; and if room for housing the crops were wanted, after the leaf is cured, the tobacco on two sticks may be put on one and placed away on one side of the house. This is called re-hanging.

A weak fire should be kept under the tobacco which fills each space between the tier poles until the leaf is nearly cured; the heat six feet above the fire should be kept at ninety degrees of Fairenheit thermometer the first and second days, and not exceed one hundred the third day. Three days will generally be required to cure the leaf, when the fire may be gradually increased until the stem is cured, which will require at least three days more with a strong fire. I consider it the better plan to cure the stem in warm weather before the fire is stopped; for if the tobacco gets in high order (that is very soft) before the stem is cured, the leaf near the stem is impoverished, which may be discovered after it is cured. In cool weather in October it is not so important to have the stems entirely cured, as the frost has pretty much the same effect as heat; yet it is necessary that the leaf be entirely cured, and the stem partly before the fires are put out, and if warm, damp weather, supervenes, or the part of the stem which is uncured become hard, for the fires to be renewed and kept up until the stems become soft and of a dark color.

Some planters keep up the fires under the tobacco day and night; but I think that firing all the night may be dispensed with, provided that at bed time the wood be so arranged that no danger of increased heat for the first three nights be practicable, and for the next three that the house be not burned. Firing all night is attended with danger to the health of the negroes; for in the tobacco house, during the night they will certainly go to sleep, and in the morning after having been profusely sweated all night, go out into the cool air, the perspiration is suddenly checked, and violent colds or more fatal diseases are apt to follow. After the curing process is performed, nothing more is necessary until it is taken down for stripping, unless in long wet spells of weather, the tobacco should be dried with a moderate fire. I will, in time for your November number, give my views upon stripping, bulking, and prizing the crop.

RICH. G. MORRISS.

Buckingham, July 29, 1841.

We return Mr. Morriss our sincere thanks for his polite compliance with our request that he would append his name to his essay. We have had repeated calls for the name of the author of the first number, and have not hesitated to give it privately. We have always found that it enhanced the value of the article.

If any gentleman differs with Mr. Morriss in his treatment of this crop, we invite him to say so, and give his reasons for it. Our object is, by free discussion, to elicit the best mode of managing this great staple of our country.

For the Southern Planter.

Middlesex County, July 21, 1841.

Mr. Editor,—I send you the names of four additional subscribers to your valuable paper, of which I have read, with much interest, every number, and I would here observe that my experience differs in part with that of the anony-

mous writer in the American Farmer, relative to suckers in corn. I saw some years ago in the Albany Cultivator the same assertion, that suckers would not lessen the quantity of corn, while they greatly increased forage, and I was induced to try it, as the latter was an important item with me. I am thoroughly convinced that my crop of corn was greatly injured, (it being a dry year) and that the additional fodder was a poor compensation. I believe, however, that the suckers, that put out below the first joint of the corn at the ground, might be advantageously left in a good season, as they always bring the ear on the side of the stalk and not on the top, as the others do.

I observed in your June number the query—"Whether the cultivator can be substituted for the plough?" My opinion is, that it may be in the early part of the season very advantageously used instead of the plough, but that corn should be well ploughed from the 20th of June to the 5th of July; after which, if dry, the cultivator should be again used in order to freshen up the land to catch the dews. A common iron tooth harrow is preferable to the cultivator when corn first comes up, as you may run it on the top of the bed, and the teeth will stir the earth immediately round the corn, and will not tear up one stalk in a thousand. This harrowing will make the corn grow much faster than a working with the hoe, and if the land does not produce much early grass, this, together with the cultivator, will not only substitute the plough but the hoe also. In order to use the cultivator to the best advantage, the corn should be planted in a row each way, and, in fact, I prefer having it so planted for any system of cultivation; as corn will bear being put much closer when the current of air has free access each way. This mode will obviate another objection, that is splitting the bed with the plough and leaving the hard land naked that was covered up in breaking the land in the winter. Very few persons can ever think of covering any thing but the place where the corn is dropped, and consequently the grass immediately springs up on the top of the bed, and renders the corn much harder to weed. Corn should be planted even with the surface of the earth and a very small portion of dirt put on it in the early part of the season, but when planted late, it must be covered deep, or the earth becomes dry, and there is not sufficient moisture to bring it up.

Should you consider these few crude and desultory observations of any consequence, you are at liberty to make such use of them as you may think proper.

Yours, JAS. S. BRISTOW.

P. S.—I observe in one of your numbers that you decline the recommendation of lime or marl as an improver of the soil, because there exists a difference of opinion as to its action as a fertilizer. Upon that principle we might refuse to partake of our daily sustenance, because we could not understand its action upon the system in order to sustain our existence and give energy to the body. The application and the action are distinct, and therefore the former should be recommended, because we know that lime improves the soil, and imparts vigor to the growing plants, although we may not know why or wherefore. I would recommend you to call upon Mr. James Christian, of Charles City County, for information as it respects marl, as he has much experience and skill in its use. To us in lower Virginia, marl is indispensable, and we would like to see something in your paper occasionally, to cheer us in our progress and combine the experience of others with our own.

J. S. B.

Upon the first point in Mr. Bristow's communication, of the propriety of suckering corn, we find a contrariety of opinion amongst our best farmers. We doubt not, that contrariety arises from inattention to the particular circumstances under which each experiment has been made. We are, therefore, pleased to see such distinctness of detail as to the season, &c. accompany any report of experiments. In this way, apparently conflicting results may be reconciled, and a chaotic mass of opposing opinion be reduced to rule and order.

Mr. Bristow has totally misunderstood us in supposing that we "decline the recommendation of lime because there exists a difference of opinion as to its action as a fertilizer." We are at a loss to conceive what expression gave rise to the supposition. We once remarked that we had carefully abstained from participation in the discussion of the *mode* in which lime acted, because we did not think any satisfactory explanation of its mode of action had yet been offered to the world, and we did not conceive our readers would be as much edified by a description of abstract theories as by reports of actual results. We thought, to use Mr. Bristow's simile, that it was wiser to induce our readers to resort to their bread for sustenance rather than to permit them to starve, whilst we discussed the theory of its operation.

We shall forward Mr. Christian a copy of Mr. Bristow's request with which we hope he will be induced to comply.

For the Southern Planter.

TWYMAN SHEEP.

Mr. Editor,—Will you be so kind as to learn for what price a pair of Mr. Twyman's sheep, described in the 76th page of the Planter, can be had, delivered in Richmond? I am particularly fond of the stock and would like to improve.

Yours, R. W. C.

Having received several applications of a similar character, we avail ourselves of this opportunity to say that we have had an interview with the gentleman who represents Mr. Twyman in this city. His views are wholly disinterested. He is desirous to introduce into this country a stock of sheep, which he considers

superior to any he ever saw. His services are entirely gratuitous. The cost of importation, including all expenses, he estimates would not exceed forty dollars a head. He would warrant them at fifty. As he charges nothing for his trouble, and is in no way to be benefitted by the transaction, he requires a deposit of the money, at least forty dollars, before he gives the order. He will import a pair for his own use and he advises those who may desire the stock to order ewes only, as the services of his ram can be had *gratis*. We were much pleased with the agricultural spirit and liberal offers of this gentleman.

LOAM.

We have received the following from a subscriber:

Hermitage, July 27, 1841.

MR. C. T. BOTTS:

My Dear Sir,—I have lately become a subscriber to the Southern Planter, but am so little of a farmer, that I do not yet understand, even the terms used in agricultural works. Thus the term "loam" (although a word in the most common use) puzzles me exceedingly. I read sometimes, of "sandy loam," "clayey loam," "rich loam," and I believe several other varieties of loam, and am perfectly at a loss as to their component parts, whether they are natural or artificial formations, or even whether they are formed on the top, or below the surface of the earth. I expect, Mr. Editor, there are others, as ignorant in this respect as I am; and you would therefore, I am sure, confer a favor on that portion, at least, of your subscribers, by giving us in your next, a particular description of the various kinds of loam, the manner of their formation, their component parts, &c.

Allow me, in conclusion, Mr. Editor, to suggest, that when any term is used in your articles, which you think may not be understood generally, to give us some note of explanation; it would certainly be of great service to us, who are learning the rudiments, and it certainly could not be objectionable to any portion of your subscribers. By the by, a vocabulary of agricultural terms, with full but plain definitions, I think would be very useful, in the study of the science of agriculture.

I am, Mr. Editor, very respectfully yours, &c.

The word "loam," like many others, is frequently used in a very loose and indefinite sense in agricultural communications. From this want of critical precision in the use of language flow undoubtedly much confusion and misunderstanding. And yet how is the difficulty to be remedied? The communicators of the most valuable agricultural facts are not always the best scholars, and we should be very loth to exclude the experience of some plain practical man, because he had used a word in a different sense from that assigned it by Johnson or Walker. Yet it is so desirable that certain fixed ideas should be attached to particular words, that we will avail ourselves of the hint of our correspondent so far, hereafter, as to make a collection of those agricultural terms, which are floating loosely upon the sea of words, and assign them their appropriate places. As to this particular word, "loam," we understand that it is used critically to express the idea of any soil, which is a compound of sand and clay. Neither a pure clay nor a pure sand is loam, but any admixture of both is. Consequently, most top soils are loams, and may be sandy or clayey loams according to the predominance of the one or other of the ingredients. The word, however, is frequently used to express the top soil, or that which is subjected to cultivation, without reference to its composition.

The following is from an old bachelor, and Heaven only knows how he learnt any thing about sweets of any kind. We wash our hands of the matter:

EXTEMPORE SWEET-MEATS.

Take out the seed of a pound of raisins—chop them fine—add a pound of sugar, and stew them lightly with just as much water as may be necessary to reduce them to the consistency of ordinary sweet-meats, and you have a very pleasant dish.

TO BORE GLASS.

The difficulty of boring glass has been experienced by all who have ever tried it. A friend of mine having occasion to bore a hole in a piece of half-inch glass used his lathe with emory alone, sand alone, and finally a mixture of the two, and after nine hours work had advanced only about the sixteenth of an inch. A paragraph in some newspaper met his eye, wherein it was stated that a drop of spirits of turpentine with a very small addition of camphor would greatly facilitate the work. The latter ingredient not being at hand, he tried the former, when to his astonishment, he made a half-inch hole in a half-inch glass in exactly three minutes and a half, using only a common brace with a bit made to bore brass.

Try the experiment yourself, that you may be able to speak with more confidence on the subject.

The above is from a valuable correspondent upon whose statements the most implicit reliance may be placed. He requests us to call the attention of scientific men to the point, and obtain an explanation of this singular but well attested fact.

DRENCHING.

It may be remembered, that, in an early number of the Planter, our readers were guarded by a correspondent against the danger of drenching. From our exchange papers we perceive that the celebrated Dr. Dick, of Edinburgh, in reply to some inquiries of a correspondent, alludes to the same difficulty in the following words:

"The simplest and best way to give liquids to a cow, when she is tied to the stake, is for the operator to pass his left hand under the cow's

jaw, and to take hold of her left cheek with two of his fingers, and with a horn or a bottle to pour the liquid into the right side of the mouth with his right hand, giving both the tongue and jaws as much liberty as possible. An assistant should steady the head, and assist in keeping it moderately high by taking hold of the horns.

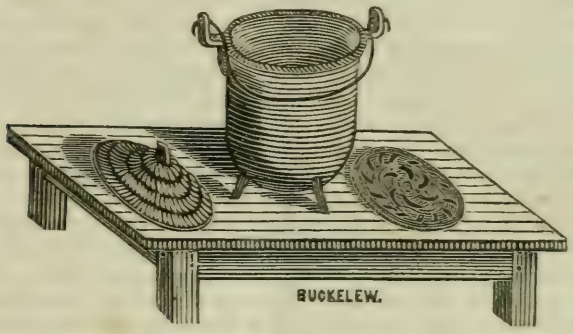
"When cattle are held by the nostrils it frequently produces coughing or sneezing, and substances are apt to get into the windpipe. It is a bad practice to press or gripe the windpipe or gullet in order to make them swallow, or to take hold of the tongue, as is frequently done; and when they cough the head should be let down at once, so that, if any thing has got into the windpipe, it may be driven out. Accidents, such as you have described, are frequent, and I think, commonly arise from the causes which I have alluded to, or the rough manner in which cattle are too commonly treated.

"I am, sir, your most obedient servant,

WILLIAM DICK."

For the Southern Planter.

POTATO STEAMER.



Mr. Editor,—Next to those which form the staff of life no vegetable is so universal as the potato. In some shape or other it forms a portion of the food of high and low, rich and poor. Yet very few are aware how much of the flavor of this delicious food is dependent upon the mode of cooking. They should never be permitted to touch the boiling water, but should be suspended over it, so that they will be subjected to the action of the steam only. In this way they will be brought to the table dry, porous, and mealy, instead of close, waxey, and water-sobbed. No two vegetables are more different than steamed and boiled potatoes. Thousands are no doubt aware of this fact, and yet there are thousands that are daily using the close, sobbed, unhealthy and tasteless article we have been describing. Every man can afford the simple apparatus that is necessary for steaming potatoes. It may be made in the shape of a tin bucket with a false bottom pierced with holes on which the potatoes may be placed, above the reach of the water, which occupies the space between the two bottoms. No kitchen is perfect without such an utensil, and yet there are many in which it is not to be found.

Yours, AN EPICURE.

We wonder with our correspondent that an apparatus for steaming potatoes is not more common than we should judge it to be from the appearance of the dish we sometimes see upon the table of our friends. A very simple utensil, for this purpose, of which we have been at the pains of obtaining a cut, may be had, at a very trifling expense, from any of our hardware stores. It is a pot, as represented, with the lid upon the left, and the perforated false bottom on the right. We know nothing that will better pay the cost of purchase.

HENRICO AGRICULTURAL SOCIETY.

Our readers generally will be pleased to gather from the following *projet* of the fall proceedings of this Society, that it is in the most flourishing condition. Although its funds are ample, the Executive Committee have wisely concluded to make the premiums numerous rather than large. We hope never to see the day when emulation is excited by large premiums. We would rely upon a spirit of generous pride rather than a love of money to do any thing. Whenever the premium becomes an object for its intrinsic value, every thing like harmony and good feeling are banished—the spirit of money making, with all his demon host, takes possession of the scene, and the *physical* is only advanced at the expense of the *moral* culture.

"The next exhibition of this Society will commence on the 20th day of October next, with stock, agricultural implements, &c. and be continued from day to day until completed.

The farmers of the State, and all others who take an interest in the cause, are respectfully invited to attend. The arrangements of the Society with its advantageous location justify us in expressing our confidence, that the exhibition and fair will amply repay a ride to Richmond from any part of the State.

The following premiums will be awarded:

No. 1. For the best stallion, for harness, the saddle, or draft, (the premium not having been awarded at the spring exhibition), $15

Committee—Gen. Bernard Peyton, R. B. Haxall, and Charles Marx.

No. 2. For the most highly improved and best cultivated farm, a premium of 25
For the second best, 20
For the third best, 15
For the fourth best, 10

Reference being had to the means (as well pecuniary as others) of the proprietor for improvement, the amount of labor employed upon it, the means resulting from the vicinity of the farm to the city, &c. The object being to place the industrious cultivator with limited resources, and no other labor than his own, upon the same footing as the largest cultivator with ample resources. It is to be distinctly understood, that not only the actual fertility of the soil will be considered, but special attention shall be paid to the means which are in actual operation for enriching the farms—to the condition of the enclosures—to the mode of cultivation, whether conducted with neatness, system, and economy—to the condition of the stock, and especially whether provision has been made for their comfortable accommodation in bad weather—the buildings also, farming utensils, garden, and every thing connected with the comfort and prosperity of the establishment, will come under the review of this committee.

Committee—Wm. H. Richardson, Richard S. Haden, and Francis Staples.

No. 3. For the best garden, not less than two acres, 15
For the second best, 10

Committee—John Carter, Richard Hill, Jr., and Joseph Sinton.

No. 4. For the best field of corn, not less than five acres, 15
For the second best, 12
For the third best, 10
For the fourth. 8

Committee—Maj. Ed. Christian, Edwin Hill, and Wm. A. Gay.

No. 5. For the best field of tobacco, not less than one acre, 10

Committee—John C. Hobson, Frederick Bransford, and Wm. Anderson, Jr.

No. 6. For the best crop of turnips, not less than half an acre, $8
For the second best, 6
For the third do. 4

No. 7. For the best crop of beets, carrots, or parsnips, not less than half an acre, 8
For the second best, 6
For the third do. 4

No. 8. For the best crop of potatoes, Irish or sweet, not less than half an acre, 6
For the second best, 5

No. 9. For the best crop of cabbages, not less than half an acre. 6
For the second best, 4

No. 10. For the best crop of pumpkins, not less than one acre, 6
For the second best, 4

Committee—Ro Carter Page, William Miller, and I. A. Goddin.

Persons who intend to compete for any of the foregoing premiums except No. 1, will please give notice to the committee appointed to award the premium or premiums for which they may be competitors, *by the 15th of September next*, after which, it will not be practicable to attend to any application.

The foregoing premiums will be awarded on the first day of the meeting immediately after the annual report to the Society—when the several committees are required to hand in their respective reports to the President. The exhibition of stock and agricultural implements will then be made, after which, a fair will be held for the sale of such stock and other articles as may be offered—and it will be continued on the second day, if not concluded on the first.

The succeeding portion of the exhibition will be in the city, in the largest room or rooms that can be obtained—when the following premiums will be awarded, after which a second fair will be held, for the sale of such of the articles as may be offered.

No. 1. For the neatest and most substantial counterpane, a premium of 6
For the second do. do. 4

No. 2. For the neatest and most comfortable mattrass, filled with hackled shucks, or cotton, and made at home, 5
For the second do. do. 3

No. 3. For the best comfort or comfortable, 6
For the second do. do. 4

No. 4. For the best bed quilt, 6
For the second do. do. 4

No. 5. For the best table cloth, 6
For the second do. do. 4

No. 6. For the neatest and most substantial carpet, not less than ten yards, 10

For the second best, $5
No. 7. For the best hearth rug, 6
For the second do. 4
No. 8. For the best specimen of stockings, socks, gloves, or mittens, of Virginia raised silk, thread, wool, or cotton, worsted or mixed, 7
For the second do. do. 6
For the third do. do. 5
For the fourth do. do. 4
No. 9. For the best specimen of fruits—apples, pears, &c. &c. 10
For the second do. do. 5
No. 10. For the best specimen of dried fruits, not less than half a bushel, 5
For the second do. do. 3
No. 11. For the best specimen of preserves, not less than one gallon, 5
No. 12. For the best specimen of pickles, not less than one gallon, 5
No. 13. For the best specimen of flowers, the production of the exhibitor, 10
For the second do. do. 5

Premiums will be given in money or plate, at the discretion of successful competitors.

The Society hopes to have the aid of the ladies, to award the thirteen last mentioned premiums.

The Committee have thought it expedient to make the premiums large in number, rather than in the amount, to afford the gratification of a premium to as many as possible.

It is to be understood, that all the articles on which the last thirteen premiums are offered, must be the production of the exhibitor.

The mechanics and artisans of the city, and others to whom it may be convenient, are respectfully invited to send to the first day's exhibition, such specimens of their own industry and skill, as they may think proper to have exhibited.

The most ample and particular arrangements will be made for the accommodation of stock, for any number of days that may be necessary, and it is recommended that it be generally on the ground by the evening preceding the first day's exhibition.

The following additional committees are appointed, viz:

To select a place for, and to conduct the first day's exhibition—the President of the Society, Charles T. Botts, and Richard Hill, Jr.

To select a place for, and to conduct the succeeding portion of the exhibition—William B. Chittenden, Gustavus A. Myers, Dr. Henry Myers, Thomas A. Rust, William McCrery, and Henry Ludlam.

Jesse H. Turner,
Thomas S. Dicken,
Richard G. Haden,
Wm. H. Richardson,
Joseph Rennie,
William D. Wren,
} *Executive Committee.*

Since sending to press the communication of Dr. G., in p. 140, we have received the following from a young but enterprising and observant farmer. We hardly know any one upon whose judgment we would sooner rely. The Doctor will find in this article answers to several of his enquiries.

For the Southern Planter.

RENOVATING MEADOWS.

Mr. Editor,—Your kind offer to take your homespun friends to your wardrobe, together with a desire to contribute my mite to the cause of agriculture, has induced me to pay a visit, through the medium of your valuable Journal, to my agricultural brethren. I give you below my method of renewing my herds-grass meadows. As early as practicable after cutting my hay, I plough up that portion of my meadow which needs re-sowing, so as to turn the sod completely over; and to effect this object more perfectly, I use a large two-horse plough, with a coulter in front to cut the sod; this is followed by a man with a hilling hoe to open the furrows, which are sometimes filled up by the turf's falling back. After the ploughing is completed, I use a heavy roller in order that my meadow may present as even a surface as possible. After this operation a bushel of grass seed should be sown to the acre and harrowed in. This method renders it unnecessary to cultivate our meadows in corn to cleanse them, as it completely destroys all of the natural grasses, and secures a good crop of hay the next summer; not however from the seed sown, but from the volunteer herds-grass, which puts up most luxuriantly between every furrow slice. If any of your readers doubt the success of the above method, let them give it *one* fair trial, and they will no longer remain skeptical. Yours,

Wm. M. Carter.

FENCING.

We have expressed, heretofore, the opinion that whenever fairly tried, the post and rail fence will be found, not only the most sightly and durable, but actually the cheapest. We are happy to find, from the Farmer's Cabinet, that a Mr. Worth of Pennsylvania, highly spoken of by the Editor, concurs in that opinion. He recommends the preparation for it as follows:

"Plant an acre of ground with chesnut and locust seeds, five-sixth of it with chesnut for rails, and one-sixth with locust for posts. Four trees will grow on a perch, making six hundred and forty on the acre. I suppose that forty of them will fail, leaving six hundred trees, each of which will produce in thirty years, and every twenty to twenty-five years afterwards, twenty rails or posts, which will yield at each cutting twelve thousand posts and rails, or two thousand pannels. Then say the acre of land is worth eighty dollars, it will reduce the

materials to four cents per pannel, which with making and putting up will not exceed twenty-five cents. In point of durability I am persuaded that it will be exceeded by none except the stone, and it will have an advantage over that by being moveable when necessary.

"One acre thus appropriated is sufficient for a farm of five hundred acres—and consequently, a quarter of an acre will be abundant for a farm of one hundred acres. To what better or more profitable purpose can so small a portion of the best land on the farm be appropriated? The only objection is, that there is no immediate availability—that from twenty-five to thirty years must elapse before the trees can be made into rails. This objection is as unsatisfactory as it is unsound. There are thousands, who, if they were *now* to appropriate sufficient ground, according to the size of their farms, and plant it as proposed, may with the blessing of Providence, live to enjoy its advantages for years. What! not plant an orchard, or a grove of locust, or a cluster of maple, because we may not live to enjoy the benefits thereof! Such sentiments should never find an abiding place in the bosom of an American farmer; for every intelligent man knows full well, that every measure of this kind tends not merely to adorn and beautify his plantation, but also greatly to increase its prospective value. Every farmer should see without delay to having his ground suitably stocked with trees.

"It is estimated that a fence of locust posts and chesnut rails, with very little repair, will last at least sixty years, so that the necessities of the farm would require only the third cutting of the timber—the two intermediate cuttings, yielding thirty thousand posts and rails, are ready for a market, which would be readily found, and which at the low rate of five dollars a hundred, would give the owner of the farm an average gain of twenty dollars, for each and every year the acre of land was thus appropriated—in addition to furnishing all necessary fencing for the farm. This, dating from the commencement, is a handsome profit."

In the Western Farmer, a Mr. Hinde, backed by the Editor, recommends the cultivation of the catalpa as the most lasting wood known in this country.

He says, "General Harrison some years ago, from his residence on the Wabash, had entertained a high opinion of the vast importance to the farmers of Ohio and Kentucky, and of the the great West generally, growing the catalpa or catawba tree for post and rail fences: his remarks were published in a Cincinnati paper. Mr. Jefferson, in his notes on Virginia, or in some other, published forty or fifty years ago, states that this tree was a native of the Wabash valley. In 1816, '17, I found them here; but no one, not apprized of the fact, would take them to be the catalpa or catawba tree, as growing wild they look like the linn. That the high recommendation given by Gen. Harrison of the timber, is correct, I shall now state, that on yesterday passing the farm of Mr. Samuel Rigg, living three miles west of this, I was shown a post fixed for a barn, and a roof formed and covered over; yet the post had shot out limbs; all but one was cut awy, which formed a shade for the stock, as well as a post to sustain a barn! Another man, about three miles from Mr. Rigg, had fixed a similar post for a gate, which has grown into a *tree*, and no trace of the post is left! A tree, fallen across a creek near Vincennes, has formed a bridge for the French for 70 years!—Mr. Rigg informed me that his barn post had lain exposed to the weather for several weeks before it was planted."

Much diversity of opinion exists as to the proper time for cutting timber, and advocates may be found, we believe, for every day in the year. The prevailing opinion in modern times seems to be, we think that timber lasts best if cut when the sap is thinnest and flowing most freely, which, in our latitude, we presume, will be about the first of May.

It is recommended also, in putting a post in the ground, to reverse the order of its growth, and put the upper end downwards.

LEATHER.

A Mr. Howd, of Wayne County, New York, has lately taken out letters patent for an improved mode of tanning leather. By means of a tight vat, from which the air has been exhausted, he accomplishes the tanning process in from twelve to thirty-six hours, making, it is said, an article superior both in appearance and quality to the one produced by the usual slow process. The rationale of the operation, as detailed in the Wayne Standard, seems to be philosophical and plausible. Many former attempts to produce the same effect have resulted in failures. Time will show the fate of this.

MISCELLANY.

RICHARD III.

Sir Robert Walpole declared that any thing was true but History. Certain it is that facts are often distorted by the passions or prejudices of historians, and when the motive for such perversion is of an universal character, the error sometimes obtains a complete triumph over truth. To lend his aid, however humble, in rescuing truth from obscurity, is the part of an honest man, and to brush away the clouds of calumny resting upon the fair fame of an individual is not less the duty than the pleasure of him, who would do justice to his fellow-beings.

There is much reason to believe that the cha-

racter of Richard III. "the crooked back tyrant," has been long resting under undeserved obloquy. We once knew a very learned and profound lawyer, much given to black letter lore, who held this opinion—his premature death alone prevented his being known as the brightest ornament of the bench to which he was raised. He contended that an examination of the statutes passed during the reign of Richard would prove that no prince, that ever sat upon the English throne, had more regard for the liberty of the subject. His administration, he said, was one of the wisest and best England ever knew; and Shakspeare, who he often asserted was the historian of England, had traduced his character, to gratify the family spleen of Queen Elizabeth. In confirmation of the opinion, that Richard has been grossly slandered as well in person as in character, we quote the following from Strype's Life of Stow, a work of the very highest authority. He says:

"One observation more, made by Stow, may here be mentioned, which I have from George Buck, Esq. who saith of him, that he was a man indifferently inquisitive after the verbal relations of the persons of princes, and curious in the descriptions of their features and lineaments; and that in all his inquiries, he could find no such note of deformity in Richard III. as historians commonly relate; and that he acknowledged, he had spoken viva voce with some ancient men, who from their own sight and knowledge affirmed, that he was of bodily shape, and comely enough, only of low stature."

The following pleasing anecdote is worthy of commemoration, as a beautiful example of one of those noble, undaunted, and generous spirits, that sometimes illumine this sordid world of ours:

A VILLAGE PATRIOT.

The footway from Hampton Wick through Bushy Park (a royal demense) to Kingston upon Thames, had been for many years shut up from the public. An honest shoemaker, Timothy Bennett, of the former place, "*unwilling* (it was his favorite expression) *to leave the world worse than he found it*," consulted an attorney upon the practicability of recovering this road for the public good, and the probable expense of a legal process for that purpose. "I do not mean to cobble the job," said Timothy, "for I have *seven hundred pounds*, and I should be willing to give up the *awl*, that great folks might not keep the *upper leather* wrongfully." The lawyer informed him that no such sum would be necessary to try the right; then said the worthy shoemaker, "as sure as *soles* are *soles*, I'll stick to them to the *last;*" and Lord Halifax, the then *Ranger* of Bushy Park, was immediately served with the regular notice of action; upon which his lordship sent for Timothy, and on his entering the lodge, his lordship said with some warmth, "And who are you that has the assurance to meddle in this affair?" "My name, my lord, is Timothy Bennett, shoemaker, of Hampton Wick. I remember, an't please your lordship, to have seen, when I was a young man sitting at work, the people cheerfully pass by my shop to Kingstone market; but now, my lord, they are forced to go round about, through a hot sandy road, ready to faint beneath their burden; and *I am unwilling to leave the world worse than I found it.* This, my lord, I humbly represent, is the reason why I have taken this work in hand." "Begone," replied his lordship, "you are an impertinent fellow." However, upon mature reflection, his lordship, convinced of the equity of the claim, began to compute the shame of a defeat by a *shoemaker*, desisted from his opposition notwithstanding the opinion of the crown lawyers, and re-opened the road, which is enjoyed by the public without molestation to this day. Honest Timothy died about two years after, in the 77th year of his age, and was followed to the grave by all the populace of his native village.

HUMAN TALLOW.

The fat of human beings, it is said, makes the best and nicest candles. What a use for some old ladies and gentlemen we have seen! Dr. Millingen tells a story of an Irish chandler, who, after the invasion of Cromwell, obtained great reputation for the beauty and excellence of his candles. After a while, the article deteriorated, and to the complaints of one of his customers, he replied, "I am sorry to inform you that the times are so tranquil, that I have been short of Englishmen for a long time." The poor Irish, we presume, would not answer.

THE UGLY LEG.

Nothing in this world is more to be admired than that beautiful and Christian spirit, which leads us to dwell upon the beauties and overlook the defects of our fellow-creatures. Dr. Franklin relates a singular expedient resorted to by an old gentleman to test the presence of this disposition. For this purpose, he made use of his legs, one of which was remarkably handsome, the other by some accident crooked and deformed. If a stranger at the first interview regarded his ugly leg more than his handsome one, he doubted him; but if he spoke of it, and took no notice of his handsome leg, that was sufficient to determine the philosopher to have no further acquantance with him.

Let querulous, carping, fault-finders, who are a disgrace to humanity, take warning from this anecdote, and leave off *looking at the ugly leg*.

IMPORTANT TO SUFFERERS FROM THE TOOTHACH.

At a meeting of the London Medical Society, Dr. Blake stated "that he was able to cure the most desperate cases of toothach (unless the disease was connected with rheumatism) by the application of the following remedy to the decayed tooth. Alum reduced to an impalpable powder, two drachms; nitrous spirit of ether, seven drachms. Mix and apply them to the tooth.

NAMES ON FRUIT.

To those who have time and may choose to make the experiment, the following may possess some interest: To make names grow in peaches, cover the side exposed to the sun, when the fruit is about half ripe, with letters of wax. This hinders the parts covered from becoming colored with the sun; and when the fruit is ripe, and the wax removed, the desired letters will distinctly appear.—*Rochester Gem.*

TO CORRESPONDENTS.

Several of those in our present number will find that we have been exercising the privilege we invariably claim, of abridging and condensing wherever we think we can do so to advantage.

To our friend J. P. D. we must apologise for the non-appearance of his valued communication. It was by some accident mislaid until it was too late for the present number. It shall have an early insertion in our next. We would be glad if, in the meantime, he would avail himself of the opportunity afforded him to authorize us to give the article over his real name.

TO MACHINISTS, PATENT RIGHT OWNERS AND OTHERS.

Any individual, from any part the U. S., who will forward to the Editor a good cut of any agricultural implement, or of any article, or animal, in its nature interesting to agriculturists, shall be entitled to an insertion and description thereof, gratis. The circulation of the paper is becoming such as to make this offer a very valuable one to such as desire to disseminate a knowledge of the implements they are manufacturing, or the animals they are breeding.

If circumstances are such as to prevent the transmission of an engraving, the Editor will undertake to have one made here, from a good drawing, on as good terms, probably, as it can be afforded in the Union.

Richmond Monthly Markets, Aug. 5th, 1841.

TOBACCO INSPECTIONS OF VIRGINIA FOR YEARS 1840 AND 1841.

			1840.		1841.	
Richmond	passed and refused,		16,834	hhds.	16,223	hhds.
Petersburg	do.	do.	12,638	"	12,101	"
Lynchburg	do.	do.	10,499	"	9,605	"
Farmville	do.	do.	4,128	"	3,891	"
Clarksville	do.	do.	2,851	"	2,686	"
All others	do.	do.	1,500	"	1,250	"
			47,950		45,756	

Foreign exports for month of July, 1841, 6,919 hhds. and 987 tierces.

The inspections of 1840 were 58,006 hhds.; we think they will be in 1841, 50,000 hhds.

The stocks of tobacco held by planters and commission houses for sale and for inspection, of growth 1840, we estimate at 7,000 hhds.

At this time the inspections average about 60 hhds. per day. Prices during the last ten days have been irregular—the tendency has been upward for lugs, and downward for leaf—present rates $4 50 a $5 for lugs, general sales; leaf $6 25 a $9; occasionally very inferior lugs sell under $4 50, and fine leaf at and above $10.

Flour.—The stock of old held for sale not exceeding a few hundred barrels: sales at $5 75 a $6—very little new yet received—nominal value $6 25 a $6 50 per bbl.

Wheat.—Receipts of new moderate—fair parcels $1 10 a $1 25.

The information we have from the country in regard to the crops, represent the yield of wheat proving much less than was estimated at the time of harvest, and generally the quality not very good. Corn has suffered by drought and recent cool weather. The tobacco crop is very backward—the planting was very large, and the plants though small stand well—seasonable weather this month and a late autumn needed to mature a good crop, both in quantity and quality.

BAGWELL, SMITH & JONES.

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THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.* | Tillage and Pasturage are the two breasts of the State. *Sully.*

C. T. BOTTS, Editor. **Opposite Merchants' Coffee House, Main Street.**

VOL. I. RICHMOND, SEPTEMBER, 1841. No. 8.

GRASSES.

From a discourse recently delivered by Dr. Darlington before the class of the Chester County Cabinet of Natural Science, we glean some important information upon the interesting subject of grasses. Dr. Darlington is a gentleman whose reputation for practical and scientific knowledge entitles his opinions to the very highest consideration. It will be perceived that in his estimation our favorite red top or herds-grass is ranked as low as No. 7, the next to the last in value of the cultivated grasses enumerated by him. Such an estimate, backed as it is by the opinion of many of our most judicious farmers, of the lightness and inferiority of the herds-grass should certainly incline us to examine its pretensions to the place it holds in our meadows. Are none of the grasses pointed out by scientific investigations, as more valuable, equally adapted to our soil and climate? Or is this inferior article forced upon us by our indolence and ignorance, rather than by any of the provisions of nature. We are not content to stand so low in the scale of grass cultivators, and shall not cease our exertions to amend our condition until we are satisfied that the evil is irremediable.

The extract to which we have alluded is as follows:

"In an *agricultural* point of view, the superior value of the grasses as materials for pasture and hay, is owing to the large quantity of saccharine matter with which they abound about the time of flowering; and which is the source of that rich, sweet odor, observable in well-preserved hay. This saccharine matter, which pervades the whole plant before flowering, and is most perfectly elaborated at that epoch, is designed to be ultimately concentrated and deposited in the seeds, chiefly in the form of *farina;* and hence we find the *herbage* of comparatively little value after the fruit is fully matured. The skilful agriculturist, therefore, when he wishes to have good *hay*, cuts his grass at the moment when the nutritious juices are most perfect, and while they are diffused throughout the plant. But when his main object is the *seed*, as in our cultivated grains, he of course postpones his harvest until the career of vegetation is finished. It is needless to enlarge on the importance of the *herbage* of the grasses, in supplying the food of our domestic animals, and, indirectly, the animal portion of our own food. I will, however, mention those species which are deemed of chief value in our meadows and pastures, naming them in what I consider the order of their excellence. 1. The meadow, or green grass, erroneously called 'blue grass,' in Kentucky (*Poa pratensis, L.*) 2. Timothy, or the 'herds-grass,' of the northern States (*Phleum pratense, L.*) 3. Orchard grass, (*Dactylis glomerata, L.*) 4. Meadow fescue, (*Festuca pratensis, L.*) 5. Blue grass, (*Poa compressa, L.*) 6. Ray grass, (*Lolium perenne, L.*) 7. Herds grass, of Penna. often called 'red top,'—the 'bent grass,' of the English, (*Agrostis vulgaris, L.*)—and 8. Sweet-scented vernal grass, (*Anthoxanthum odoratum, L.*) There are a few other grasses—native, or partially naturalized—to be found on our farms,—and which are more or less eaten by cattle, when the better ones are wanting; but they are of comparatively little value, and good farmers are always desirous to supersede them, as soon as possible, by some of those above named. It is remarkable, that all the grasses here enumerated, are believed to have been introduced into our country. They are all more or less extensively naturalized; but some of them require to be regularly sown, to insure a full crop; and are therefore known as *artificial* grasses. Those generally cultivated here, are the timothy and orchard grass,—and occasionally we see the ray and herds-grass, or red top; though these last are not so much esteemed. The others are completely naturalized; and when the soil is either originally fertile, or adequately improved, the best of them, viz. the meadow grass and the fescue, soon appear spontaneously in our pastures, and supersede the artificial ones. Now and then we hear of attempts to introduce *new* grasses to the notice of our agriculturists, accompanied by exaggerated statements of their value, such as the Taller oat-grass, (*Avena elatior, L.*) sometimes called 'grass of the Andes;' and a few years since, one of our coarse indigenous grasses, called 'sesame' or 'Gama grass,' (*Tripsacum dactyloides, L.*) was so extravagantly lauded in the journals, that many lovers of novelties were induced to try the experiment of cultivating it, in place of the old approved plants; but, like some *other* 'experiments' that we wot of in our day, it resulted in a total failure. It is indeed exceedingly doubtful, whether any other grasses are so well adapted to our climate and our wants, as those old and long-tried acquaintances of our farmers, which I have already enumerated."

For the Southern Planter.

My Dear Sir,—I have seen and examined, with much pleasure, the June number of your Planter, and my attention was particularly directed to a communication written by E. W. on the use of leaves and wood offal for compost. Notwithstanding I am young and inexperienced in the farming system, and in some respects agree with your experienced correspondent, yet in others, I regard him quite discouraging and rather defective than otherwise. 1st. He informs us, that he is satisfied of having completely impoverished a valuable piece of wood-land by the annual removal, for several years, of the fall coating of leaves. Of this fact no doubt can exist in the mind of any practical or scientific man, inasmuch as a correct knowledge of the gaseous properties of vegetable matter, as well as experience, fully demonstrates it. 2d. He proceeds to give us his present plan, which is to remove the undecomposed vegetable matter from the land that he is clearing. None perhaps will call in question the utility of this plan. Now, I presume that E. W. intended his piece on this subject for practical purposes, and so ought every communication to be on the science of agricultural pursuits. So far as the plan of hauling leaves and litter into the farm pen is concerned, from land just cleared, none will disapprove. But has he told us how much land he clears annually, or whether he clears annually or not? And the number of loads of litter he carries into his farm pen during the fall, winter, and spring, from the land he has cleared? I think not. Also, has he told us the number of loads of manure made, and the number of bushels to each load, by pursuing his plan, and how, or in what way he appropriates this manure, and the benefit resulting therefrom to his land or crop? These are the facts that we wish to know as farmers, and this is the kind of information that we trust your experienced correspondent will give us in future.

Again, Mr. Editor, it seems to my mind that E. W. has given us a one-sided view of this subject, and that too, connected with his own interest and peculiar situation in life. How, I would like to know, is the plan to be pursued by those farmers, who perhaps have not one-half or one-tenth part of the forest land to clear that he has. My own limited observation, both in Virginia and elsewhere, has long since taught me that many farmers cannot judiciously clear their forest land, nor cut down one stick of wood, except for timber or to burn. If this statement be doubted by E. W. I invite him to take a short excursion from home, and pass through central Virginia, and I will vouch for it, that he will see scores and hundreds of farmers, who are worth from one to fifty thousand dollars that are situated as above stated. What must they do for wood offal and leaves on his plan?

I will now, sir, present a case, through your excellent paper, for his disposal. A farmer has but two hundred acres of land—one hundred and fifty of which is ordinary land, and the remaining fifty acres forest land. Of course it would be unadvisable in him to cut down and clear up the fifty acres, or any portion of it for the sake of the litter upon it, and yet the experience of your correspondent has not suggested any plan for him to pursue, nor many others, in rather a worse condition. Herein I regard his communication deficient and still wanting much more of that experience of which he speaks. He has thrown the young farmers of our country into a wide sea of uncertainty, without a helm to guide them, and without a bottom or a shore. I for one trust, that he will in future give us a better outfit, rather better accommodations, and direct us to some more certain and safer harbor. I, Mr. Editor, do not set up any claims for having much experience in farming or improving land. Of this you are informed from the outset of my remarks, and yet young as I am, I will propose a plan to be pursued by those farmers, whose situations in life are not so enviable as E. W.'s is; and if convinced in future that I am wrong, and a better plan is proposed, I will abandon it, as it is my purpose to elicit information on this, as well as many other subjects, and not controversy. Divide the above named fifty acres of timbered land into five equal parts. The result will be ten acres for each year during five years. The first year the farmer may haul into his farm pen the leaves and litter from the first ten, and the second year from the second ten acres, and so on for five years, until he gets over the fifty acres. Let the compost be annually applied to his common land, and no doubt he will soon discover his thin land improving, while his forest land has not sustained any injury. This practice may be kept up in rotation for twenty years, (that is) taking off the litter every five years from either of the ten acres, without injury. These are facts that have been demonstrated by some of our judicious managers and will be demonstrated again even if E. W. never does it.

Now, Mr. Editor, as I am a friend to you and to your laudable and praiseworthy undertaking, in supplying the southern farmers and planters with such a valuable desideratum, let me suggest to you the propriety and importance of insisting on your numerous correspondents combining practice with their theory—to give demonstrable proofs, stubborn and undeniable facts upon the different agricultural pursuits of the day. When your columns become filled with such communications as these, then I endorse for it, that your paper will have a wider and more extended circulation than any other of the kind in the nation. Regard not this suggestion as being dictatorial on my part, as I am using

my small influence in removing objections to your paper, and hope in less than one month to give you a stronger proof of my attachment to it, by swelling the number of your subscription list.

I hope, sir, that the time is not distant when the Southern Planter is to find a warm and cordial reception in the house of every farmer and planter scattered over the length and breadth of this great republic.

I remain, with high consideration,
Your friend and obedient servant,
A YOUNG FARMER.

We have a word or two to say upon the above. Like "A Young Farmer" we desire to "elicit information not controversy." And we, therefore, suggest to our friend E. W. that there is no room here for the latter. We see no discrepancy whatever between the views of E. W. and our correspondent. E. W. asserts that his experience justifies the reasonable conclusion, that wood-land will be injured by an *annual* robbery of the leaves and offal, and "A Young Farmer," agreeing with him, recommends, very judiciously, that the wood land for this purpose be divided into five shifts, so that no portion will be robbed but once in five years. Where a farmer is clearing as much land as he needs for litter, as we suppose E. W. is, no such arrangement is necessary, and his course, we presume, is exactly what "A Young Farmer" would recommend. We do not know that "A Young Farmer" has any right to find fault with E. W. because he did not go farther and tell us, as *he* has done, what would be the most judicious plan under other circumstances.

What we most covet, is precisely the kind of communications to which "A Young Farmer" alludes, plain, practical results of actual operations, as free as possible from all taint of abstract theories. We desire to make the Planter a record of such.

DRILLING WHEAT.

The following is entitled to the gravest consideration, not less from the importance of the subject than from the source from which it is derived. Drilling is the favorite mode of cultivating wheat in England, but has been discarded here because of the supposed increase of labor. But if Mr. McClean, who seems to have conducted his experiments with great care, is right in concluding that three times as much wheat may be made by only the additional expense of drilling, instead of sowing broadcast, a hundred contrivances, in these days of improved implements, may be found to obviate any difficulty from this source.

We had heard of the wonderful result of this experiment, and put ourselves to some pains to obtain an authentic statement of the particulars. When a fact so important is vouched for by such authority, we cannot permit ourselves to imagine that the farmers of this great wheat growing province will rank it with the numerous experiments that are hourly detailed, only to be forgotten. We hope that thousands of farmers in this State, deeply interested in the production of this great staple, will, this fall, repeat this experiment for themselves. We will pledge ourselves, if it is successful, to furnish them with an implement by which the trouble of drilling shall be entirely obviated.

This is the age of agricultural improvement, and we doubt not that we are on the eve of revolutions, which are to enhance an hundred fold the profits of husbandry.

What a noble example to the agricultural societies of the State is afforded by the conduct of Dr. Archer. As the President of the Society for Elizabeth City he obtains and forwards to an agricultural paper a statement of an experiment, made by an individual in his district, that it may become common property. How much might be effected by this interchange of information, and to what more valuable purpose could an agricultural society be devoted than to the collection and publication of such important facts?

"*Old Point Comfort, Aug.* 22, 1841.

"Dear Sir,—I enclose you a copy of a letter received from Mr. McClean on the subject of drilled wheat. His experiment is a very interesting and important one, and deserves to be prosecuted farther. I saw this wheat, and think I never saw a more luxuriant growth or one that promised a greater yield; but Mr. M. omits one important fact—it suffered somewhat from the rust.

"The objections urged to drilling wheat in this country, where land is cheap and labor high, are first, that the drilling is expensive, and secondly, that to secure any advantage from drilling, the crop must be worked; or in other words, that drilling is only to be resorted to, as it enables you to work the crop. If this were the fact, I should say, that no Virginia farmer would be justified in drilling his wheat: but the fact is the reverse; for drilling is attended with no increased expense, (other than the cost of the drill) and the labor of working the wheat would be thrown away. The increase of product, therefore, arises from the more equal distribution of the seed, the uniform depth at which it is covered, the free circulation of air through the drill, and the better condition in which the land is left by the operation of the drill plough.

Very respectfully,
Your obedient servant,
R. ARCHER."

"*Elizabeth City County, Aug.* 17, 1841.

"DR. ROBERT ARCHER,
President A. Society Elizabeth City County:

"*Dear Sir*,—Late in October ult. I thought I would experiment a little by drilling two-thirds of an acre of wheat, believing that drilling a full crop would pay me much better than a crop sowed broadcast.

"In this two-thirds of an acre, the rows fifty to sixty yards long, there were sixty-three rows seven inches apart, and seventy-four rows fourteen inches apart.

"If any difference in quality or quantity of wheat in these rows, it was in favor of those seven inches apart, where five pecks were drilled to an acre.

"At the rate of ten pecks, were drilled on two beds drills seven inches apart: this I found by far too thick: the wheat did not produce so well, and looked sickly from the time it first came up.

"The wheat came up well, but looked no better than my crop in general, until it began to head. Early in April I ran a large harrow over it; thought it improved its appearance; latter part of April or first of May I ran a cultivator between the drills (fourteen inches apart) on two beds; but at reaping time I found no material difference between that worked and that unworked. The weeds were completely kept under where the drills were close; not so with those fourteen inches apart.

"On this two-thirds of an acre I made fourteen bushels, and had it all been drilled seven inches (which produced as well or better than the fourteen inches) I would have made twenty-one bushels, a yield of thirty-one and a half bushels to the acre—three times as much as my general crop averaged.

"I am so confident of the success of drilling, that I intend to drill thirteen acres this fall. I have a machine made by Mr. Jabez Parker, of Richmond, invented by Mr. Andrew Bartle, of this county, by which wheat can be drilled with less trouble than it can be sowed broadcast, provided the wheat is to be ploughed in.

"This drill can in a few minutes be attached to any plough by any common hand.

"I shall be able, after my crop of thirteen acres is reaped, to give more on this drilling system.

I am, most respectfully, yours,
A. B. McClean."

HAY.

We commend the following to the attention of our hay makers. To the community in this neighborhood, it would be unnecessary to speak of Mr. Sydnor's character for judgment and general intelligence. To those to whom he is unknown we undertake to say, once for all, (for we hope to hear frequently from him) that it is undisputed. He is by profession a HAY MAKER. He cuts probab more blue than herds-grass, and is therefore uninfluenced by interested motives in his view of the subject.

Mr. Sydnor insists that the herds-grass of the north is an entirely different article from the one we cultivate under that name. This may materially affect the conclusions to be drawn from Dr. Darlington's estimate, noticed in another place. The greatest confusion, we know, prevails upon this subject, soon to be dispelled, we hope, by the laudable efforts of Mr. Curtis and the Editor of the Farmers' Register.

To the Editor of the Southern Planter:

Sir,—In looking over the table of contents to the July number of the Planter, my attention was drawn to an article headed Hay—and as a school boy's notice is first directed to the pictures in his book, so I, invariably, read first in every agricultural work I meet with, every thing that has any connection with this valuable crop. Indeed, sir, I consider hay as a "sine qua non" to the farmer—an article, absolutely and indispensably necessary for the comfort and well being of his stock, for the purpose of making manure, and, as a necessary consequence, the improvement of his land.

Having premised thus much, I will proceed to review, in my plain and rude manner, the article alluded to, signed "Chickahominy"—and I hope by so doing, to induce some one, over his proper signature, who is more skilled in farming, as well as writing, to come out on the subject, and give his views of the facts. Your correspondent, after speaking of the immense quantity of Chickahominy bottoms and their rich soil, proceeds to compare the different kinds of hay, usually cultivated on these bottoms, as to their value and adaptation to the said lowlands. It seems that your correspondent forms his conclusions not from actual practical knowledge, but from casual observation and the opinions derived from others. Were I not well acquainted with the different kinds of hay cultivated on these bottoms I would not dare express any opinion, much less make assertions in opposition to the opinion of Chickahominy; but having lived on this creek or river (as it may be termed) for the last eight years, and turned my attention almost exclusively to the cultivation of hay, I feel privileged to say something, inasmuch as I conceive Chickahominy to be in an error, and may possibly lead others into the same.

Chickahominy, I have no doubt, is correct in his opinions as to the extent and value of these lowlands; but as to the comparative value of blue grass, herds or red top and timothy, and their adaptation to Chickahominy lowgrounds, I must beg leave to differ with him. My experience in the matter satisfies me that as fine timothy and herds-grass can be raised on Chickahominy bottoms as on any other unmanured lands in lower Virginia, and that three, four, and sometimes many more heavy crops have been and may be taken from the land without reseeding. As a general thing, however, it will

be found best to fallow up and re-seed about every fourth year. I have some herds-grass meadow, now eight years old, which yielded this year a fair crop, at least between three and four thousand pounds to the acre—and the quality, at any rate, merchantable. True it is, there are many spots on the river, and some I have no doubt on every farm, which are better adapted to blue grass than either of the others under contemplation. Blue grass delights in low, moist, and indeed wet situations, where the other two would not live, and it will not grow well any where else—whereas a large portion of these bottoms, so far as they are now cleared, are sometimes too dry even for herds-grass. On such places as blue grass seems to flourish, I would recommend its *encouragement*, not *cultivation*, for it requires none; and all that is necessary to encourage it, is to cut it down twice a year—not with the expectation, however, of getting three tons per acre at each cutting; but about half that quantity, I suppose, may be calculated on with some certainty. I would here observe that blue grass, when growing, and even when being mowed, is very apt to deceive one not well acquainted with its growth. Like fodder when green and growing, it makes a large show, but when cut, cured, and secured in a stack or barn, the bulk as well as weight is most materially lessened. Indeed, it loses more in curing than any other hay I have ever seen, not excepting clover.

Admitting for one moment that a blue grass meadow will yield annually as much per acre as herds-grass or timothy, a fact which I have never witnessed, and supposing the lands to be better suited to its growth, a part of which only is in reality, the harvesting is double, the quality inferior, (salt or no salt*) and the price in market about one-fifth less than any artificial hay within my knowledge.

W. B. Sydnor.

For the Southern Planter.

SLAVERY.

NO. II.

My Dear Sir,—With your permission I will resume my observations upon the subject of slave labor. I have endeavored to show that it is in general the cheapest labor that this country affords, both because of its effectiveness, arising from subordination and continuance, and also because its price is victuals and clothes of the cheapest kind. I have said that labor obtained for mere food and clothing was the cheapest that could be afforded in any country. Hence unless there is labor in Europe (which it is not to be doubted there is) worse fed and clothed than our negroes, we have the cheapest labor in the world: certainly none can be afforded in our own country at so low a rate. This is true in the *general*, but is very dependant upon the management of those who have charge of this particular species of labor. It is always to be fed, and must be always at work. This a good manager will effect. The advocate of white labor contends that the farmer only wants labor occasionally, and that the expense of supporting the slave when he is not at work more than compensates for the additional price of white labor. This argument points out most strongly the manner in which alone it can be refuted, viz. to provide work for every day in the year. A good manager will take care that no hand on his farm eats the bread of idleness for a single day, and if our farmers would only calculate upon each rainy day the clear loss upon the hands not at work, such contingencies would be more generally provided for. A little system will readily obviate this difficulty.

Good management consists not only in providing work for your laborers but in the manner in which the laborers themselves are controlled. Upon this important point, there is much error arising, either from ignorance or want of system. Negroes are like any other ignorant men in a state of subordination; they require to be managed with kindness, tempered with the greatest firmness. The most exact discipline is as necessary as in a school or on board a ship. Too much attention cannot be paid to their necessities, and the humane master will find a thousand opportunities of exhibiting the kindness of his disposition to his slaves. But his orders, which should not be variable, must be obeyed, or punishment must follow. With a strict observance of this rule, punishment will soon be unnecessary, because there will be no disobedience. Under such a system, the negro is the most cheerful, grateful, and faithful laborer upon the face of the earth. It may be argued that few men are calculated to command and control others, to the greatest advantage. This is true; it is no common quality, but one extremely valuable to the southern cultivator, and where it is not possessed by nature, it is often obtained by study and practice. System, order, and management are every thing upon one of our large landed estates, and call forth, in their exercise, no ordinary powers of mind.

I would by all means advise our farmers to eschew hired labor, under our system. The habit of permitting the hireling, at the end of the year, to choose his own home, leads to a change of labor, that renders a slave at least twice as valuable to his master as to an individual hiring him. Besides the change of masters, from the subjection to a variety of systems, renders the slave unfixed in any; moreover, the pride of ownership on the part of the slave (a

* Chickahominy says it should be salted.

southern man will understand what I mean) is lost, and the power of changing his place gives him a degree of independence incompatible with necessary subordination. I once heard a very learned gentleman, who had very little experience, descanting very eloquently upon the difference between white and slave labor. I asked him whether, in speaking of slave labor, he alluded to hired slaves, or such as were owned by the operator. He replied that he had never heard of such a distinction, and did not know there was any difference. Although I did not tell him so, his reply satisfied me that he had very little practical information upon the subject on which he was talking so learnedly.

I conclude by asserting that under the control of good and judicious men, the southern master and slave should neither desire to exchange situations with any other similar classes upon the face of the earth.

Yours, J. S.

For the Southern Planter.

MANURING.

Mr. Editor,—I have seen much in your valuable periodical, which, by the by, I hope will soon be in the hands of every practical farmer in Virginia at least, on the subject of manuring; a great deal that I think very excellent, and some things that I do not entirely approve. You well remark that the subject is all-important, and as any statement of facts may be desirable, I will give you some that have induced me to differ with the generality of farmers upon the use of long provender.

I was at one time in the habit of passing all of this through the stomach of cattle, to be converted into manure, and actually undertook to winter other people's cows for the benefit of their offal. A very shrewd, unlettered old neighbor used to laugh at me a good deal for supposing, as he said, that I could give some to my neighbors' cattle and have more left; which he called working subtraction by the rules of addition. Moved more by the ridicule than the argument of my old friend, I at length, to show him how absurd his *theory* was, carried out several stacks of straw in the fall, and spread them upon my corn land. In the following summer, I turned it under, and sowed my wheat upon it in the fall. Since that crop, I have never wintered other people's cattle, and any of my neighbors may take as many of mine as they please.

I do not know that I ever would have been induced to admit that my neighbor's practice was better than mine, notwithstanding the increase of my crops under the new system, had I not discovered that he had attributed the effect to the wrong cause. The improvement is not so much owing to my turning in the whole of my straw, as to the covering it affords the land. Now, I am not exactly philosopher enough to account for this well known fact, which I have never seen explained, but certain it is, that the mere covering of the land makes it wonderfully productive. A galled spot, upon which a few planks are laid, will become extremely fertile; and the places over which our fodder stacks are placed are proverbially productive. So it is with the land covered with straw, and I am inclined to think, this principle, well examined and carried out, would lead to a great revolution in our methods of improvement. At any rate, I was highly gratified to find, that if I had erred, it was not so much because I worked arithmetic badly, as my neighbor maintained, as that I was ignorant of a fact unknown to him. I am now thoroughly satisfied, that, if any one will try the experiment fairly, he will reduce his stock to the number absolutely necessary for his purposes, and haul out all his extra fodder, straw, leaves, &c. as a covering for his land. It is worth three times as much to him, used in this way, as when it is digested in the stomachs of other people's cattle, or even cut to pieces in his own farm yard; for although, in the latter case, he may get as much of the nutritive properties of the straw, eventually, he loses the benefit of the cover, which is infinitely more valuable, in the meantime.

Yours, W. W.

This we look upon as a very important suggestion of our correspondent. We have often had our attention called to the fact he mentions, the well known value of a cover to land. We think with him the principle is worthy of investigation. He is a practical and successful farmer, whose name is at the disposal of any one who chooses to make private inquiry for it.

CHARCOAL.

Since the publication of Dr. Liebig's late work upon "Chemistry applied to Agriculture," some very interesting experiments have been made upon the fertilizing powers of powdered charcoal. That from the pine, used in our blacksmiths' shops, has so far proved the most valuable. Mixed with the soil in different proportions, it has been found to promote the growth of healthy, and to restore the drooping powers of sickly plants. This article is so readily obtained as to offer an inducement to our farmers and gardeners to try some most interesting experiments for themselves in this comparatively unexplored field of agriculture.

SALTPETRE TO PEACH TREES.

Mr. Littleton Physick, in a late communication to the "Cultivator," states, as the result of experiments continued for the last five years, that he has found an application of salt and saltpetre to peach trees an effectual cure for

the canker worm. Mr. Physick applies a half pound of the mixture, in the proportion of one-fourth or more of saltpetre to the surface of the soil, in contact with the trunk of the tree, about the month of April, and if there are indications of the worm, he repeats the process with about two-thirds of the quantity again in June and September. Every second or third year he sows the mixture, broadcast, over his orchard, at the rate of about two bushels to the acre. By this means, he restored, to the surprise of himself and neighbors, an orchard full of worms, which he was advised to give to the axe. He finds not only renewed vigor imparted to his trees, but increased flavor given to his fruit. When he sets out young trees in the spring, he applies, as soon as he is done planting, about one ounce of the mixture, and repeats it in June and September.

Mr. Physick thinks that this application in the spring will retard the developement of the bud, and thereby save the fruit from frost. Mr. P. lives in Maryland, and of course as to the periods of time specified, allowance must be made for the difference in climates.

With a plate of this delicious fruit by our side, we cannot refrain from pressing upon the attention of our orchardists any thing which has a tendency to ensure us the grateful refreshment of its luscious juice, during the exhausting heat of our summer months. In addition to its value as a most acceptable luxury, it is well worthy of regard as a source of profit. To satisfy our farmers of that fact, it is only necessary to state, that fine peaches are readily bringing, in our market, from two to four dollars a bushel, and that large quantities might be annually sold to our city ladies for domestic purposes.

AGRICULTURAL IMPLEMENTS.

We have received a complaint, well founded, no doubt, of the serious inconvenience experienced by farmers from the neglect of the makers of agricultural implements generally, especially of ploughs. Our correspondent points out the excessive delay and vexation of being compelled to go to the shop to repair a bolt, imperfectly made or fitted, to open a wrench too small in the eye, and a thousand other imperfections, arising from the carelessness of the manufacturer.

There is no doubt that our farmers suffer extremely from such slight causes, and that from the fact of their not being mechanics, they are egregiously imposed on by the makers of these implements; but we think they themselves are somewhat to blame, and that they have the remedy in their own hands. If they want good work, they must be willing to pay fair prices, and they may be assured whenever they purchase a low priced implement they have gotten an indifferent one. They jump too readily at low priced articles, made for sale, without sufficient regard to the workmanship; thus offering a premium to the workshops of the north to slight their work. To fit and finish well requires time, which always commands money, and we have often seen articles in this market that we knew could not be *well* made for double the price at which they were offered. Still they sold readily, because they were *low*, and no doubt gave rise to such complaints as we have received. There can be no economy in a *cheap* tool. If you cannot afford to buy a good one, wait until you can. You never can afford to buy an indifferent one.

PLASTER OF PARIS.

A writer in the Farmers' Cabinet strongly recommends the use of powdered plaster of paris on stable floors. It has been found, as stated by Professor Liebig, to absorb the ammonia arising from urine and thereby to render stables where cattle are confined perfectly sweet, healthy, and inodorous. Without it the ammonia that arises is not only lost, as far as vegetation is concerned, but is productive of weak eyes and other diseases arising from the stench of foul stables. One bushel per month is considered sufficient for this purpose, though much more might be used to advantage, as there is no better way of preparing the plaster for the purposes of vegetation.

For the Southern Planter.

BERKSHIRES.

My Dear Sir,—I have seen and heard much of the Berkshires and have no doubt that for some purposes they are the most improved hog now known to the agricultural world. But I maintain that they are not calculated for this particular region. My objections are that they fatten too easily and arrive at a heavy weight too early. With the exception of a few jockey pigs, raised about the house, we must continue to range our hogs, and hence they must ever be exposed to depredation. Now a round fat sleek Berkshire presents a temptation that the pilfering propensities of our negroes cannot resist. Our only safety is in your long legged lean and hungry alligator, which he could not catch if he would, and would not if he could. If any man attempts to keep a large number of Berkshires in this neighborhood, he must house them every night under lock and key.

Again, as to the bacon they make. I am old fashioned in my taste, and prefer a Virginia ham to any other eating in the world. Now I do not believe that a prime ham can be made of the true flavor out of any hog less than two years old, or from any except a poor hog just fattened up. But your Berkshire never gets poor, and at the end of two years is an overgrown mass

of grease, well adapted probably to making gross meat for negroes, but totally unfitted for the delicate highly flavored table ham. That new flesh affords the most delicate food is no new idea, but one well recognised amongst beef eaters, who all admit that the most delicate eating is obtained from an old worn down ox just fattened up.

Remember, sir, I am speaking of the delicacy of bacon without regard to the expense of making it, which by the by no true lover of bacon will ever regard. My devotion to the article may make me over particular, but I must confess I look upon one of your overgrown Berkshires with great distrust, and set down to my favorite ham with a melancholy foreboding that its delicate sweetness is destined to yield to the greasy rankness of the new breed.

AN AMATEUR BACON EATER.

New Kent, Virginia.

BREEDING.

Many of our farmers seem to consider that it is sufficient for them to purchase a good stock, and that the system of scientific breeding is much too complicated for them. We assure them that they may continue the plan of importation until all their means are exhausted—their stock will continue to degenerate unless they learn to sustain and improve it by judicious crossing. To assist them in effecting this object we quote the following remarks from a work of Mr. Cline's, who was one of the most celebrated anatomists and authors England ever produced:

"Although the form of domestic animals has been greatly improved by selecting with care those possessed of the best shape for breeding, yet the *theory* of improvement has not been *so* well understood, that rules could be laid down for directing the practice in every case; and although the *external* form has been much studied and the proportions well ascertained, these are but indications of *internal* structure,—the principles of improving it must, therefore, be founded on a knowledge of the structure and use of the *internal* parts; and of these, the *lungs* are of the first importance; it is on their size and soundness that the strength and health of an animal principally depend, the power of converting food into nourishment being in proportion to their size, an animal with large lungs being capable of converting a given quantity of food into more nourishment than one with smaller lungs, and therefore having a greater aptitude to fatten. The external indications of the size of the lungs are, the form and size of the chest, but a *deep* chest is not capacious, unless it be proportionally broad.

"The *pelvis* is the cavity formed by the junction of the haunch-bones with the bone of the rump, and it is essential that this cavity should be large and capacious; its size is indicated by the width of the hips and the breadth of the twist—which is the junction of the thighs—the breadth of the loins being always in proportion to that of the chest and pelvis. The head should be small; the length of the neck in proportion to the height of the animal; the muscles and tendons large, the strength of the animal depending more on the muscles or tendons than on the bones: many animals with large bones are still weak, and those that are imperfectly nourished during their growth, have their bones often disproportionately large. A compact, round made body, a deep, full chest, a broad loin, full flank and straight back, a small head and clean chaps, with fine tapering neck, limbs and bones not coarse and large, a soft but not thick skin, with soft and fine hair, are amongst the chief marks of a good kind.

"It has been generally supposed, that the breed of animals is improved by the largest males: this opinion has done considerable mischief, and probably would have done more, if it had not been counteracted by the desire of selecting animals of the best form and proportions, which are rarely to be met with in those of the *largest* size; experience has proved that crossing has only succeeded, in an eminent degree, in those instances in which the females were larger than in the usual proportion of females to males, and that it has generally failed when the males were disproportionately large. If a well formed large buck be put to small ewes, the lambs will not be so well shaped as their parent; but if a good *small* buck be put to larger ewes, the lambs will be of an improved form: the improvement depends on this principle, that the power of the female to supply her offspring with nourishment, is in proportion to her size and the power of nourishing herself from the excellence of her constitution. The size of the fœtus is generally in proportion to that of the female parent, and, therefore, when she is disproportionately small, the quantity of *nourishment* is disproportionately small, and her offspring has all the *disproportions* of a starveling: but when the female, from her size and good constitution, is more adequate to the nourishment of a fœtus of a male smaller than herself, the growth will be proportionately larger; the larger female has also a greater quantity of milk, and her offspring is more abundantly supplied with nourishment after birth. To produce the most perfectly formed animal, abundant nourishment is necessary from the earliest period of its existence, until its growth is complete.

"To obtain animals with large lungs, *crossing* is the most expeditious method, because well formed females may be selected from a variety of a large size, to be put to a well formed male

that is rather smaller; by such a mode of crossing, the lungs and heart become larger in consequence of a peculiarity in the circulation of the fœtus, which causes a larger proportion of the blood, under such circumstances, to be distributed to the lungs than to other parts of the body, and as the shape and size of the chest depend upon that of the lungs, hence arises the remarkably large chest, which is produced by crossing with females that are larger than the males: but this practice must be limited, for it may be carried to such an extent that the bulk of the body might be so disproportioned to the size of the limbs, as to prevent the animal from moving with sufficient facility, so that, where activity is required, this practice must not be extended so far as in those which are intended for the food of man. The kinds of animals selected for cross-breeding ought never to be of *very* different habits and sizes, for notwithstanding the confessed advantages derived from cross-breeding, yet, great or sudden changes are highly improper, that having often been found injurious to the health and character of the stock: the use of bucks of the pure Dishley or Bakewell stock has, with several coarse flocks of sheep, been attended with no sensible advantage, owing to this cause, the characters and habits of the breeds being so widely dissimilar. Whenever, then, cross-breeding is attempted, care ought always to be taken to do it gradually, and to rear the progeny in a proper manner; and when the matching is conducted progressively, and with due attention to the diversity of habit in the animals, it succeeds well; the chief art being, to begin gradually at first, and in process of time, as the blood of one family is diminished, that of the other will be increased, till improvement to the degree wished for be attained by gradual approximation.

"The great improvement of the breed of horses in England arose from crossing with those diminutive stallions, Barbs and Arabians; and the introduction of Flemish mares was the source of improvement in the larger breed of cart horses; the form of the swine has also been greatly improved by crossing with the small Chinese boar: but when it became the fashion in London to drive large bay horses in carriages, the farmers in Yorkshire put their mares to much larger horses than usual, and thus did infinite mischief to their breed, by producing a race of small-chested, long-legged, large-boned, worthless animals; and a similar project was adopted in Normandy, for the purpose of enlarging their breed of horses, by the use of the Holstein stallion, by which the best breed of horses in France would have been spoiled, had not the farmers discovered their mistake in time, by observing the offspring much inferior in form, to that produced by their own horses."

TREATMENT OF COWS.

A writer in the New England Farmer asserts, that experience has satisfied him of the impropriety of high feeding before parturition. It leads, he says, to swollen bags and difficulty of labor. On the contrary, by a more meagre diet for several weeks, these difficulties are avoided, whilst an equal quantity of milk can be produced by a generous after keep.

BUG—TO DESTROY.

We are informed, upon good authority, that a certain preventive against the striped bug, so injurious to vines, has been discovered by the water melon growers of "old Hanover." An onion button placed in each hill produces a plant at which these gentry turn up their noses, and walk off. This is no *humbug*. Remember, next year, to *plant onions and save your vines.*

SILK.

Mr. John Fox, who in a letter to the Editor of the Western Farmer speaks knowingly, declares, that there, are, already, silk machinery and fabrics in this country equal to any in France or England. He alludes particularly to the superior brilliancy of the American silk. The chrysalis, he says, should be killed with a fumigation of sulphur; great injury is frequently done by baking and steaming the cocoons—the former draws out the staple from the silk, the latter causes it to flake off when reeling. He recommends Dennis' silk manual and the Burlington feeding frame above all others.

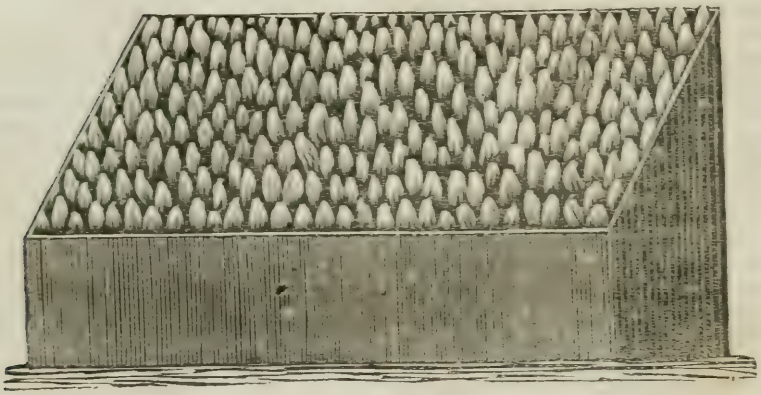
CLOVER—A RENOVATOR.

We extract the following from a long letter from Mr. A. Beatty to the Editor of the Farmers' Register on the Preservation and Renovation of soils:

"Soils which have beeen reduced by cultivation, where they have not been injured by washing rains, may be easily renovated. This must be done by again supplying them with those fertilizing ingredients of which they have been deprived by bad husbandry. This may be accomplished in part, by the application of manure; but it is to the atmosphere we must look as the great storehouse whence we are to draw the necessary supply of vegetable food. To this end, those green crops should be freely cultivated, which derive most of their food from the atmosphere. In soils adapted to it, red clover is the most suitable for this purpose. It is by far the most convenient and the cheapest method of renovating exhausted soils. It not only supplies a great deal of vegetable matter to soils that have been much reduced, but it is admirably calculated to pulverize and reduce its component

parts to a finely divided state, and thus to produce a condition favorable to a combination with those elementary principles which are furnished by the atmosphere; and also greatly increases its capacity for absorbing moisture. Care should be taken also to suffer as few weeds to ripen their seeds as possible. These, previous to the time of ripening their seeds, derive nearly the whole of their nutriment from the atmosphere. By destroying them before they seed, nearly their whole product of vegetable matter is a net gain to the soil. Exhausting grain crops should be sparingly cultivated till the soil is completely renovated, and then should bear only such a proportion to the green crops as the soil will bear without deterioration. It should be a fixed principle never to suffer the soil to deteriorate, for as it costs as much to cultivate a soil producing only half or two-thirds of a crop, as if it produced a full crop, it is perfectly clear that it is the interest of the cultivator to keep his land always in good heart. Besides, it is less difficult to keep land in a state of fertility than to renovate it after it has been exhausted by careless husbandry. But it is time to bring my desultory speculations to a close."

SWEET POTATO KEEPING.



The following is the sequel to a communication, on the subject of the sweet potato, published in the second number of the Planter. The article at the time attracted great attention, and was extensively circulated.

The keeping the potato is attended with more difficulty probably than the cultivation, and we will only repeat here that Mr. Bernard is as remarkable for his success in the one as the other.

SWEET POTATO KEEPING.

My Dear Sir,—In compliance with the promise I made last winter, I now proceed to detail for the Planter my method of keeping the sweet potato. I beg here to repeat my unshaken confidence in the superiority of this vegetable over every other root I have ever known as a food for man and beast.

The popular objection, viz. the difficulty of making and keeping was for some time an insuperable one with me, and it was not until after years of experience and trial, in which I was sustained by a consciousness of their great value, that I was enabled to succeed to my satisfaction in either. I now find no difficulty in either the one or the other.

I will premise a few words as to the proper mode of harvesting. When my potatoes are fully matured, which is generally about the 20th of October, I commence digging them. My first operation is to cut off the vines upon the tops of the ridges, (see p. 18) with an instrument not unlike a reap-hook, with a sharp, smooth edge. These vines I deposite in the centre between the rows. I then proceed with a single plough to run deep furrows on the sides of the ridges, turning the earth over on the vines. Then, with a broad hoe, set a little slanting, I strike at the bottom of the ridge containing the potatoes, and raising the earth on the hoe seize the top with one hand, when with a little exertion all the roots are disengaged from the earth, frequently in a cluster. The same day they are assorted; the small ones saved for feeding, and the large ones separated, to be packed away for winter use. At all times, great care is taken to prevent their being bruised.

To preserve potatoes a warm, dry atmosphere, in the strictest sense of the word, is absolutely necessary. The warmth cannot well be ob-

tained out of a cellar, and I found for some time great difficulty in obtaining the requisite dryness in one. To effect this object, the walls must be protected from the dampness of the earth lying against them, otherwise, the water oozes through and produces dampness, in spite of you. After trying drains of every description without effect, I fully succeeded by sinking a narrow ditch alongside of the wall and puddling it well with good clay, intermixed with a little coarse gravel. This method I would strongly recommend to all, whether in town or country; for, a dry cellar is not less conducive to health than convenient for domestic purposes.

My cellar is provided with windows for the admission of light and air, and with a fire-place to warm and dry the atmosphere when necessary. In this cellar I have two wooden bins, fourteen feet long and seven feet wide, with a convenient passage between; the sides are four and a half feet in height, next the wall, from which they are distant three or four inches. The front, next the passage, is reduced to fourteen inches. The floors are made of plank and raised a few inches from the ground. The bottoms are strewed with well dried rye straw, and a coating of the same is interposed against the sides, as the bins are filled. I handle the potatoes one at a time, and commencing at the back part of the bin, place them on end, with the stems upwards, as they grew in the earth. This, from experience, I believe to be the best way of placing all vegetables that it is intended to keep. The figure at the head of the paper will more clearly exhibit the position of the potatoes and the shape of the bin. By this means, openings are preserved from the top to the bottom, by which they are completely ventilated, whilst a sufficient warmth is created by the bulk to prevent their freezing.

I am careful to keep a good fire burning in the cellar, with the windows open, whilst I am sorting and packing, that I may drive off the dampness created by the potatoes themselves. After the bank is completed, and begins to heat, I cast over the top a little sand, which soon becomes dry from the heat of the bank, when I move a broom lightly over the top, displacing the sand and causing it to fall into the bank. This is repeated three or four times, as the heating may require, after which, I leave a thin coat on the top as a winter covering.

I am aware that many who may read this article will come to the conclusion, that my method of packing is difficult and tedious: the correctness of which I am ready to admit, but the vegetable is delicious and valuable. I myself, however, can pack about a hundred bushels a day after they are prepared to my hand. I know of no other method by which they can be preserved with as much certainty.

I will mention for the benefit of those who may not have cellars suitable for keeping vegetables, that I have succeeded remarkably well, by putting them in small parcels in a hill, out of doors, made in the following manner. I chose high ground for the location, and raised the plat of the hill a few inches above the surface by the use of a broad hoe. Upon this plat I laid corn-stalks, and upon them straw or pine beards, on which I placed my potatoes, raising them in the shape of a sugar loaf, as steep as I could, then covered them over well with straw; upon the straw I then placed corn-stalks, up and down, thick enough to prevent the pressure of the dirt upon the potatoes, and then I covered the whole with a light coating of earth; after which, I set up planks around the hill to ward off the rain and prevent the dirt from cracking or washing. It so remained until the weather become cold, when I added as much earth as would secure the potatoes from freezing, and replaced the planks. In this manner I have kept them free from injury, but it should be borne in mind, that large parcels would be apt to spoil from the heat they themselves would generate.

Your obedient servant,

JOSEPH BERNARD.

FRUIT.

The season for setting out young trees is approaching, and we desire most earnestly to impress upon the minds of southern farmers the advantages of a good orchard. We have in this vicinity nurseries of the most thrifty trees, of every variety. We know the proprietors of two at least, upon whose honesty the most implicit reliance may be placed. We shall be happy to attend, personally, for a small percentage, to any orders that our friends may forward. We hope that they will not let the season pass without obtaining a supply from some source. It may, undoubtedly, with great advantage to health, be substituted for more expensive food, both for man and beast. Upon this subject we extract the following from an address delivered by Mr. I. Breck before the Westboro' Agricultural Society:

"There can be no doubt in regard to the profit which may be derived from raising good fruit.

"The best policy is to have none but the very finest varieties of fruit on the place, such as will find a ready sale at the best prices. The windfalls and unsound fruit should be fed to the swine or converted into cider for vinegar. Orchards may be set out expressly for the use of swine and other stock. We know of a number of fine, thrifty young orchards of sweet apples, set out by men who have long used them to great advantage for feeding their swine, and who consider a bushel of them equal to a bushel of potatoes: they are valuable also for cows and horses.

"One great advantage arising from the culti-

vation of fine fruit is, that a free use of it is favorable to health. In the Annals of Horticulture, the advantages of it are set forth in the following language:

"'One of the best aliments and the best adapted to the different ages of life, is that which our fruit affords. They present to man a light nourishment, of easy digestion, and produce a chyle admirably adapted to the functions of the human body. Thoroughly ripe fruit eaten with bread, is perhaps the most innocent of all aliments, and will even insure health and strength.

"'There are fruits which when perfectly ripe, can be eaten to excess, without inconvenience, such as grapes, cherries, and currants; the other kinds never occasion ill consequences, if they are eaten only to satisfy the demands of nature.'

"As far as my own observation goes, I fully agree with the above writer. For, not having had the taste vitiated by *tobacco* or *ardent spirits*, I have always retained the high relish for fruits, which seems to be inherent in our natures, and have habitually used it freely when it has been in my power to obtain it. When toiling in the sun in our warm summer days, I have found there was nothing so grateful or refreshing as fruit. A plate of strawberries, currants, cherries, or a melon, with a little bread and cheese, for a lunch, taken under a tree, fanned by the pure country air, is a luxury indeed; and will be found more effectual in recruiting the exhausted frame and quenching the parching thirst, than any thing else that can be named, even were the whole list of aliments or stimulating drinks called over. With fruit, a very little drink, even of cold water will be found necessary. Having had an abundance of cherries for a number of years past, I have eaten them in their season almost to excess, and found that health was improved by the use. I have eat them in the morning as soon as I have risen and could get to the trees, and at all times of the day. I have frequently made my breakfast on bread and cherries, or strawberries, with a little milk or coffee, and found myself equally refreshed as if I had taken more substantial food; and it is my candid opinion that if fruits were more generally raised, and formed a part of every meal, it would be found by all to be beneficial to health and at the same time a saving to the purse. A writer in the Medical and Surgical Journal says, 'That instead of standing in any fear of a generous consumption of ripe fruits, we regard them as positively conducive to health. The very maladies commonly assumed to have their origin in a free use of apples, cherries, melons, and wild fruit, have been quite as prevalent, if not equally destructive in seasons of scarcity. All naturalists will testify to the importance of fruit seasons to the lower animals, particularly birds. When there is a failure or an insufficient supply, the feathered tribe are less musical, less numerous, and commence their migrations much earlier than when amply supplied with the delicate nutrition designed for them at certain periods of the revolving year.

"'There are so many erroneous notions entertained of the bad effect of fruit, that it is quite time a counteracting impression should be promulgated, having its foundation in common sense, and based on the common observation of the intelligent.

"'We have no patience in reading the endless rules to be observed in this department of physical comfort. No one, we imagine, ever lived longer or freer from the paroxysms of disease by discarding the delicious fruits of the land in which he finds a home. On the contrary, they are necessary to the preservation of health, and therefore caused to make their appearance at the very time when the condition of the body, operated upon by deteriorating causes, not always understood, requires their grateful renovating influence. Tyssot, in his advice to people upon their health, says: 'There is a pernicious prejudice with which all are too generally imbued. It is, that fruits are injurious in the dysentery, and increases and produce it. There is not perhaps a more false prejudice. Bad fruits and those which have been imperfectly ripened in unfavorable seasons, may occasion cholics and sometimes diarrhœa, but never epidemic dysentery. Ripe fruits of all kinds, and especially those of summer, are the true preservatives against this malady.' He farther says, 'that whenever the dysentery has prevailed, I have eaten less animal food and more fruit. And I have never had the slightest attack. Several physicians have adopted the same regimen.'

"'I have seen eleven patients in the same house; nine were obedient and ate fruit; they recovered. The grandmother and a child which she was partial to, died. She prescribed to the child burnt wine, oil, powerful aromatics, and forbade the use of fruit: it died. She followed the same course, and met the same fate.'

"The strawberry is considered by many medical men as a valuable medicine in many diseases; particularly for putrid fevers and pulmonary consumption. A free use of strawberries, it is said, will both prevent and cure the rheumatism. The celebrated Linnæus cured himself of the gout by persevering in a regimen of strawberries."

FREE MARTIN.

Our readers are aware that this term is applied to the female twin of a cow when the other is a male. It has been universally received as a singular fact in natural history that in the case of such a twin production, although the male grows up to be a perfect and productive animal, the female is invariably barren, and medical

writers have used many exertions to remove the prejudice which, reasoning from analogy, has sometimes unjustly attached to members of the human family similarly related. An instance, probably the first upon record, has happened in this vicinity of a "free martin" being the mother of a calf. The mother and offspring are both doing well, and she is probably destined to be the progenitor of a long line of descendants. We have this fact, which is worthy of record, from the owner of the cow, a gentleman of the highest respectability, for whose veracity and particularity we are ready to vouch.

We invite particular attention to the following communication. We hear on all hands that Mr. Turner has every thing connected with his stock in apple pie order, and we promise ourselves, as soon as our avocations will permit, the pleasure of a visit to his piggery; when, perhaps, we may be able to supply the deficiency in drawing of which he complains, and thereby treat our readers with a view of some of his "beauties."

To the Editor of the Southern Planter.

Dear Sir,—In pursuance of my plan, I now proceed to treat of the accommodations, which I conceive are best calculated to insure success in the rearing of the hog—for although the animal of which I treat is a *brute*, and that brute a poor degraded *hog*, still I think our own interest, is concerned, in providing for him comfortable accommodations.

And here I will frankly state that I have been induced to pay considerable attention to this subject, from the fact that I have embarked in the rearing of the hog, as a matter of business and profit. After reading therefore all that I could command on this subject, and after reflecting much more, I ultimately fixed upon a plan, with which, upon trial, I am very well satisfied. In arranging my pens, I had two distinct objects in view—the first was the comfort of the tenants, and the second was, my own profit in keeping them. With these two objects in view then, I erected two lines of pens parallel to each other, which of course formed a lane between them. This lane may be of any width that fancy dictates, but I find that 20 feet is wide enough. At one end is a gate communicating with one of the common highways through the farm—at the other end is another gate leading into the farm-pen, and thence into the woods. When the gates are shut I have a space completely enclosed 88 feet long and 20 wide. This place answers a great variety of valuable purposes. By keeping it constantly covered with litter, I here raise a considerable quantity of manure. It is at all times a play-ground for the pigs, and when thirty or forty, (as is often the case,) are sporting their mock fights, or indulging in their playful gambols, it presents a scene of very lively interest. I also use it, more or less every day, as a place of exercise for the larger hogs. Here also the cart passes along loaded with litter, which is distributed to the right and left, and thus the pens are supplied with this very necessary article. In the same manner the manure is removed, when it has accumulated to a sufficient quantity. And here I will remark, that by frequently putting in fresh litter, and thereby removing the whole, as soon as it is converted into manure, there is never the least offensive smell issuing from the establishment. Lice and flies, and vermin of every sort, are completely banished from the place, by frequently strewing small quantities of tobacco trash in the beds, and after answering this purpose, the tobacco makes the very best manure.

But to return to the pens—each pen is furnished with a door opening into the lane, by which I let *in* and let *out* the hogs. And this I find a great convenience, for by it I avoid the vexatious trouble of catching and lifting them when I wish to change their position. My doors are all hung on hinges and fastened with an iron hook on the outside, but a sliding door to slip up and down will be cheaper and answer the purpose nearly as well.

I have often regretted, that in the little education which it was my good fortune to receive, I was not instructed in the beautiful art of drawing. Were I competent to the task, I would with much pleasure present a sketch of my piggery. As however I have no talent in this way, I must content myself with a simple description.

In constructing my pens, I used strong boards 16 feet long. You will then conceive a square 16 feet in diameter both ways. This is divided in one direction by a partition running the whole length of the square. We now have two pens each 16 feet long and 8 wide. These are again divided by another partition running in the contrary direction so as to form two other smaller pens, the one, (which I call the outer) 10 feet by 8—the other (the inner) 8 by 6. Thus the whole original square is divided into four departments—two outer, each 10 by 8, and two inner, each 8 by 6. Between the outer and the inner there is a hole about 2 feet square through which the hogs pass in and out at pleasure. The outer and larger pen is uncovered. Here I feed and water the hogs, and this is their workshop in making manure, here also they bask in the sun and otherwise enjoy themselves when the weather is pleasant. The inner and smaller pen is covered with a roof sloping to the outside. Here the hogs retreat when the weather is cold or otherwise bad—this is also their chamber; and here they find a shade when the sun shines hot. I will observe further, that all the pens are furnished with a floor made of pine poles laid close together and covered with dirt, and in constructing them I was careful that the floor should slope to the lane, so that all the liquid of the

pen is conveyed to the lane and there absorbed by the litter.

My practice is when I wean the pigs (which ought not ordinarily to be done under two months old) to put about twelve in one of these pens and there they remain together until they become so large as to incommode each other whilst eating at the trough. Six are then removed to another pen, and this I find is about the proper number to keep together. I close my account of the pens, by stating that the whole establishment is watered from a cistern, situated about midway of the lane, and this is supplied with water from a well at no great distance from it.

These small pens, occupied by a small number of hogs, have, as I think, a decided advantage over pens of larger dimensions. Every thing is here brought into a small and convenient compass. Your litter is concentrated, and therefore more speedily wrought into manure. The hogs are all divided according to age and condition. The sow with pig, and the sow suckling her pigs, are kept apart from the rest. The small and weak are put by themselves, and thus are not annoyed by the large and strong. You feed some more, and others less, according as they need it. And in one word every thing goes on with system, economy and comfort.

Now go to a large pen and mark the difference. There the boar and the sow, the full grown hog, and the suckling pig, and all the variety of grades between them occupy one common promiscuous place. In eating, the fat and strong get more than they need, whilst the poor and weak are stinted in that which is absolutely necessary for them. It follows therefore, that whilst the fat become fatter, the poor will constantly decline and thus become poorer. Besides as these large pens are never floored nor covered, they become in wet weather intolerably filthy, not from manure which might be removed and turned to good account, but from the *mud* which is not worth removing. I have known hogs kept for several months and even fatted, in a large pen, from which no more manure was obtained, than I get, as I verily believe, from one of my small pens.

I have now detailed my plan for accommodating my hogs, and I can say from experience, that thus far it works well. But were I in a different situation; that is, were I further from market, I could adopt a plan, which I doubt not would work still better. It is this—I would have just such fixtures as I have described above, but attached to them should be clover lots, or other lots well set in grass of some kind, with a stream of water passing through them. And then to complete the picture, I would have a grove of shady trees (a fruit orchard would be a most invaluable addition) to which the hogs might have access at pleasure. In the day (say from the first of May till late in the fall) I would suffer them to luxuriate on the grass and fruit, or bathe and cool themselves in the water, or lie under the shade, just as they were inclined. In the evening after regaling themselves all day, I would collect them in their lane, and thence distribute them, according to age and condition, in their respective pens. Nor let it be objected, that the hog cannot be reduced to this state of discipline. A little patience on the part of the hog-herd, and a few lessons given to his charge, will make the whole easy. John Taylor, of Arator memory, has said in one of his essays that "pigs are as tractable as puppies." When I first read this, I really thought that this pioneer of improved farming was jesting. But a further acquaintance with the subject of my essays, has convinced me that there is much propriety in the remark. Every morning, before leaving their pens, and every evening after returning to them, I would give the hogs a plentiful feed of such things as I could command, of which, corn in some form, should as often as possible, form a considerable part. I think it of great consequence, that the hogs should be regularly herded in their pens every night. Several important objects will be found to result from it. They will thus be rendered more quiet and tractable; and above all, they will thus contribute largely to the stores of manure, which are of so much value to the farmer. They will thus also be maintained continually in a good thriving condition. The young will grow rapidly, and the older will be found to have made great progress towards becoming fat; so that comparatively little corn will be needed to complete this important but usually expensive process. The remainder of the year, that is during the inclement season, I would confine them closely to their pens, merely allowing them the indulgence of occasional exercise for the sake of their health.

Now contrast what I have said with the mode in which hogs are usually treated. In summer no food whatever is given to them, nor have they very frequently any pasture of any kind, but are turned out to pick up what precarious subsistence they can find. Can it be wondered at then, that they are the thievish wretches we often find them to be? In winter they fare still worse. With food enough barely to keep soul and body together, without shelter, without comforts of any kind, they drag on a miserable existence, mere objects of loathing to the owner and terror to the neighborhood. But I am making my paper too long for practical purposes, I will therefore stop. In my next I propose to consider the profit of the hog.

Yours, &c. J. H. Turner.

HORSE SHOEING.

My Dear Sir,—I observed in the last Planter

an article upon horse shoes, that puts me in mind of a circumstance from which I derived a good deal of benefit, and which I will relate for the good of your readers.

I happened, several years ago, to be at the blacksmith shop where I get my work done, when an old gentleman of the neighborhood rode up, accompanied by a negro man with several horses, who wanted shoeing. The smith had been very lately introduced into the neighborhood and had great reputation. I offered to defer to the old gentleman, although he was the last comer, but he was too managing for that; he insisted upon it that I should have my horse shod while he looked on. Accordingly, the smith proceeded with his operations. The old man seemed to be pretty well satisfied, until the smith, having fitted the shoe and driven the first nail, began to twist the end off. This he protested against, and by ocular demonstration, showed the difference between wringing the nail off and breaking it by bending backwards and forwards. In the former case, the part of the nail in the hoof is twisted, and a round hole is cut, which is filled only with its own dust: no wonder the nail in such a hole would soon work loose. Moreover, in twisting the nail, the corner edge is frequently presented to the hoof, and does not clinch half as well. From that time to this, I have never permitted my smith to "wring a nail," and I assure you I have found my profit in it.

This to be sure is a small matter, but there is not one smith in fifty who is not guilty of the error here exposed; and small errors are sometimes productive of serious evils, especially, as we all have heard, in the matter of a horse shoe.

Yours, H. T.

From the Kentucky Farmer.

HORSE DISTEMPER.

It is an inflammatory disease, and shows itself in young horses by the want of appetite, the dull, languid look of the animal, his cough, and then a running at the nose. This disorder always affects the head more or less; it is distinguished into the false or genuine, and the malignant; the first is less a disorder than a purifying of the humors, necessary to all young horses. When the running of the nostrils is not abundant, a tumor is formed under the lower jaw that opens, sooner or later, and discharges a great quantity of matter. That is the genuine or benign distemper; the false or malignant is derived from the first, when it has not been well cured, and re-appears, and is a malady of the same kind, with the same symptoms. If it is not cured thoroughly, it turns infallibly into the glanders, very seldom cured, and devotes the animal to a certain death. The malignant distemper is accompanied with a high fever, a swelling of the head, hard breathing; and the running at the nose is so thick that it comes with difficulty; the animal must immediately be bled, in order to abate the inflammation. The nostrils must be injected with mullen or flax-seed tea, or both combined; it prevents the ulceration of the inside of the nose, and facilitates the running of the matter, particularly if a fumigation is added to the above. It is made in the following manner; boil oats in the mullen tea, or flax seed, or bran, or any other substance which, when thick enough, retains long a sufficient degree of heat; put a small quantity of this wash into a bag two and a half feet long, and large enough to admit part of the horse's head; a thong of leather or rope fastened to the bag goes over the head like a headstall. The wash must not be too hot as the horse could not bear the steam; much less too cold, or it would have no effect. When, after a certain time, it is partly cooled, take off the bag, and begin often the same operation again during the day, observing to take the bag off to let the horse snort out the matter, if he is so inclined, and put it on again if still warm enough.

If the tumor under the lower jaw opens of itself, it should be rubbed with the following ointment: beat one or two yellows of eggs with spirits of turpentine, and put some of it on a bunch of tow, held fast by a sort of covering or bandage to keep the cold from the sore; it is necessary to observe that any open sore or wound should be covered to exclude the external air and all kinds of insects. This dressing must be done every day exactly. When the horse is cured, he must be purged once or twice, in order to carry off the remains of any venemous matter. Care must be taken to water the horse out of a bucket, if during his sickness he could not stoop his head to drink as usual; as he is feverish, the want of water would increase his sickness and his sufferings. During the horse's sickness, he must be dieted in the following manner: cut straw and bran; his drink, mullen or flax-seed tea, with a handful of bran, sometimes a little salt given milk-warm. If the weather be cold, a sick horse ought to be covered, if possible, or at least sheltered from the cold.

Grass-founder or melted fat is an inflammation of the inner soft membrane of the bowels, lined with a mucous substance that lubricates them in that disease, and looks like melted fat; it is most common in summer after too much fatigue and over feeding, or too strong a physic. It is the dysentery of horses; the animal dungs with effort, and the excretions are mixed or covered with a sort of jelly, and sometimes slightly bloody; the animal is very thirsty, looks towards his sides, which beat violently; loses his appetite, grows poor, and may lose his life if not cured in time. As soon as the disorder is known, the best remedy is injections of mullen, bran, or flax-seed; very little hay, no grain. Bran and

water, in equal parts and drinks of slippery elm, if the first objection could not be procured. Boiled barley, mixed with honey in small quantity, makes a cooling diet and is used with success.

I am, with esteem, yours,

M. MENTELLE.

MANGE IN DOGS.

The following receipt comes from an old sportsman, one well skilled to all that pertains to horse and hound.

My Dear Sir.—A love of that faithful animal, the dog, induces me to send you the following remedy for the mange or scratches, as it is sometimes called, a disease with which he is very often grievously afflicted.

Give 50 grains of arsenic twice a week; mix equal quantities of red precipitate and venice turpentine in hogs lard, with which he should be anointed two or three times a week. Repeat the arsenic and the ointment, taking care to rub the latter in well, until the dog is cured. This will be evidenced by the heal by appearance of his coat, and the increased liveliness of the animal. It will generally be effected in two or three weeks. I have after much practice found it infallible.

Yours, JOSHUA GOODE.

POTATOES.

Mr. Albert Hobson, of Henrico, called on us to state, that, last spring he planted two parcels of potatoes under exactly similar circumstances, except, that one was several inches deeper than the other—the shallower being about 4 inches deep. He found the deep planted to stand the drought, and turn out in every respect, much better than the others.

The following recipe has been going the rounds, and as the season for this valuable fruit is not yet over, we copy it from the American Farmer either to be used now or remembered for another year.

TOMATO FIGS.

Patent Office, July 10, 1841.

Dear Sir,—The medicinal qualities of tomatoes have greatly increased their cultivation, and every new preparation of the article is deserving consideration. A sample of "tomato figs" have just been deposited at the Patent Office of a very superior quality. From the taste, I should suppose all the good qualities of the fruit are retained. In appearance the drink of tomatoes resembles one of figs so nearly, that they might be easily mistaken for the same.

The sample is deposited by Mrs. *Steiger*, of this city, and the recipe transmitted with it is enclosed for publication. It is deeply to be regretted, that since the periodicals of the day are open to communications, that so many valuable improvements are lost to the world, barely for the want of publicity. Others may have dried the tomatoes with a recipe, however, less successful. Very respectfully,

H. L. ELLSWORTH.

Hon. J. S. Skinner.

Take six pounds of sugar to one peck (or 16 lbs.) of the fruit. Scald and remove the skin of the fruit in the usual way. Cook them over a fire, their own juice being sufficient, without the addition of water, until the sugar penetrates, and they are clarified. They are then taken out, spread on dishes, flattened and dried in the sun. A small quantity of the syrup should be occasionally sprinkled over them whilst drying; after which, pack them down in boxes, treating each layer with powdered sugar. The syrup is afterwards concentrated and bottled for use. They keep well from year to year, and retain surprisingly their flavor, which is nearly that of the best quality of fresh figs. The pear-shaped or single tomatoes answers the purpose best. Ordinary brown sugar may be used, a large portion of which is retained in the syrup.

PRISON LABOR.

We see that the New York mechanics are stirring upon the grievance they sustain in the application of convict labor to mechanic arts. This has been a subject of loud complaint in this metropolis. The subject is the more interesting to our agricultural community, because the convicts in our Penitentiary are devoted chiefly to the production of agricultural implements.

Two grounds of complaint are urged by the mechanics. First it is contended that the honest and industrious citizen is driven out of the market by the cheaper labor of the worthless convict, and, secondly, that their profession is degraded and corrupted by forcing into it the lees of society.

The first objection would *seem* to enure to the advantage of the agricultural community. The mechanic can only be driven out by means of cheaper labor, and of this cheaper labor, the farmer here at least, gets the benefit. This, however, is a pecuniary view, and if the farmers of Virginia thought that this system benefitted their pockets only at the expense of the morality and independence of their brothers, the mechanics, we do not hesitate to say for them, that they would spurn it indignantly. But are they benefitted? We think that, upon closer examination, it will appear that their interests are materially injured, and that they should wage common war on this subject with the mechanical profession. What is the effect of a system, which enables the state, by means of convict labor, to come into successful competition with the laborious arti-

san? It is to remove him beyond the baleful influence of the system, and to build up a monopoly within it. Fair competition, which engenders skill, ingenuity, and activity, is lost, and in these arts a stationary if not retrograde position is produced. The quick-sighted, vigorous and sharp-witted artificer is exchanged for the inert, listless, and unpractised convict. From the changeable nature of the labor too, which generally is retained too short a time to become perfect, the workmanship is that of unwilling apprentices, and with such, the community must be satisfied. These facts we know are fully exemplified in our own community. There are one or two mechanical trades, especially that of wheelwrights, that has been almost driven from our city. Our metropolis, which should be the focus of the arts, can hardly furnish a road wagon, except such an one as may be found at the store-house of the Penitentiary. The consequence is, that our farmers suffer for many improvements in hubs, axles, &c., known and used to the north, and are compelled to drag the heavy, cumbrous, and unimproved vehicle that killed up the horses of their forefathers. We do not mean to underrate the work of our own institution. We believe that none could be in better hands, and are sure that the people of the Commonwealth are highly indebted to the energy and management of its worthy and ingenious superintendant. We only mention these facts as inherent difficulties of the system, as it at present exists. But this difficulty is easily remedied and we maintain that the remedy is loudly called for by both the mechanical and agricultural interests. Let the Legislature, at its next session, fix a scale of prices at which articles manufactured at the Penitentiary shall be sold, without regard to the cost of production; and let those prices be such as will afford a profit to the out-door manufacturent equivalent to the ordinary profits of mechanical pursuits. And if the institution be brought in debt, be it so—better that the State bear the whole expense, than that the great mechanical or agricultural interest of the country suffer the least jot or tittle of injury.

The second objection, viz. the swelling the ranks of any particular profession with the convicts of the country, is one of much greater difficulty. We respect the feeling which induces the mechanic to spurn the imputation thus thrown upon his caste, and to scorn the alliance thus forced upon him. But these convict gentry must be made to work, and they must have given them the means of making an honest livelihood, for the want of which, perhaps, they were led into temptation. Now, if their occupations should be changed, any other branch of industry would have the same right of complaint, and we should be driven either to abandon the system of labor, or tolerate the evil complained of.

EVERLASTING PEA.

In the course of conversation, a few days since, Gen. Overton, of Louisiana, formerly of Virginia, informed us, that he thought a pea, cultivated in his State, would be a great acquisition to this country. He says it is called the everlasting pea, that the vine is so luxuriant that it frequently runs to twenty feet, and the pea so hardy, that it will lie either on, or under, the ground for the whole winter without rotting, thus affording a continued and most luxuriant pasturage. Its fertilizing properties are such, that two crops turned in are found to make the land too rich for the cultivation of cotton, and one, even after it has been pastured, is sufficient to restore the original fertility after the cultivation of the most exhausting crop.

We should be extremely obliged to any of our subscribers in Louisiana, who will contrive us a few of the seed of this valuable plant.

For the Southern Planter.

RYE.

Mr. Editor,—How very fond of novelties we are, and how apt to neglect things, with which we have grown familiar, for others that are presented under the imposing recommendation of being *new*. For many years I have never failed to cultivate a crop of rye, and I have often thought, if I could only give this old fashioned article a new name, with half the recommendations to which it is entitled, that I could sell the seed for three dollars a bushel, or, possibly, for five dollars a head. Suppose I were to advertise it as a new variety of grain, called "Siberian rye," which yielded a great product on poor land, its straw the most nutritious ever used, and its grain one of the very best articles for horse feed, and invaluable in raising pigs—"price five dollars a bushel." Wouldn't I make a fortune before it was discovered that it was an old thing with all the properties described? I have heard some object to it that their horses would not eat it. It is true, that horses greatly prefer it ground and mixed. I have owned a variety of horses since I commenced using it, but I have never found one that refused a mess of rye straw cut and well mixed with rye meal. My own opinion is that those crops that perfect their seed, although they require more labor, and are more exhausting, are more profitable too. The grain obtained will always afford the means of restoring more than it takes away. Therefore, I prefer rye and oats, as crops, to hay and clover. "Manure highly, and crop closely" is my system.

Yours, ARATOR.

OATS.

The Editor of the Farmers' Visitor records the fact that during a severe drought this spring

he made twelve tons or three hundred bushels of oats from four acres, which he ascribes principally to their being thinly seeded. He says:

"Land which yielded less than half a ton of hay to the acre in the summer of 1839, was ploughed up in the sward about the 20th of May, 1840—about forty loads of manure were spread to the acre; a portion of it was turned under the sod—a portion was ploughed in to the depth of four inches, and a portion was simply harrowed under; and the land produced a very decent crop of Indian corn and potatoes. The original sod was hardly disturbed either in the last year's cultivation or the ploughing of the present spring. The land was simply ploughed once the present spring, and six bushels only of oats sowed upon four acres. The oats came up so thin that several persons pronounced there would be nothing of them early in June: they branched and spread in the course of the summer so that they were as heavy upon the ground as if double the quantity had been sowed. Some of them were five feet in height, and the straws of the size of pipe stems. The whole piece, with the exception of the tramping and rolling over in some spots by three unruly boys upon the Sabbath, stood up well—much better and stronger than it would have done had the blades been more numerous."

THE EFFECT OF UNDER DRAINING.

There is a field on the estate of the Earl of Leicester, at Longford, in this county, which some years ago was occupied by Mr. John Sherratt, and brought forth rushes in such abundance, that the occupier gave leave to any body to carry them away who would be at the trouble to mow them. Three years ago the field was drained, under the direction of Mr. T. Harper, of Foston; and this year, we are told, the present occupier, Mr. T Robinson, has cut three tons an acre of as nice herbage as ever grew.

Derbyshire Chronicle.

ASPARAGUS.

The New Genesee Farmer gives the following method of cultivating this popular vegetable:

"An observant neighbor proposed to us, the other day, to recommend planting asparagus in a single row, each plant two feet apart; in beds, the plants crowd each other, and as if surrounded by weeds, send up more slender stems. These remarks agreed entirely with our own observations; for though we have been at the expense of making deep beds of the best materials, our finest asparagus grows in common soil where the seed was accidentally dropped. In beds it is difficult to remove such seedlings as spring up, without injuring the roots of the older plants; but from a row this may be easily done; and all plants that intrude on them should be treated as weeds.

"To raise the plants: separate the seeds from the berries, and sow them in a bed *late in the fall*, (not in the spring) covering them with fine earth half an inch deep. If put in rows, so that the hoe can pass between them the next season, they may be kept clear of weeds more conveniently; and when one year old, if they have had plenty of room, they may be transplanted. One long row may be the best. And be careful that not more than one plant is set in a place.

"The cropping that asparagus endures, is very severe; and it seems reasonable that the plants should be strengthened by the growth of three years before they are molested. To cover the stools in the fall with stable manure, and to rake off the coarser parts in the spring, is an old and excellent practice: it protects them from the frost of winter and manures them at the same time. Strewing salt over them liberally in the spring, also adds to their vigor. In a few years, an asparagus plant, neither crowded on by others nor over-cropped, will form a stool from twelve to eighteen inches across."

The lovers of sweet flowers may derive advantage from the knowledge, that sandy or gravelly soils promote the secretion of aroma. Those flowers of the richest perfume, are natives of sandy lands, Persia, Arabia, &c. and those in pots should, therefore, be supplied with a portion of sand or gravel.—*Western Farmer.*

PEACH TREE BORERS.

Our readers will remember to look to the roots of their trees at this season for eggs and young worms which are preparing to make their entry. Boiling water, strong ashes, lie, or lime, applied to the body near the root, will destroy all that have been there deposited during summer; and we may trust to Providence to convert all the old worms in the tree to batches of flies, in which state they do no harm to the trees.

Boston Cultivator.

CORN STALKS.

A correspondent in the S. C. Advocate writes as follows:

"*Mr. Editor*,—I have often wondered, that farmers have not more generally adopted the plan of using corn stalks, after the fodder is gathered, as food for horses, mules, and hogs. I have followed the practice for many years, and am convinced that it has effected a saving of not less than a hundred bushels of corn annually. And yet I am persuaded, that if I could get my overseers to attend more particularly to my di-

rections, that I could save double what has been done. The only danger in their use with horses or mules, is the tendency to produce colic or laxness, which may be easily prevented by brining the stalks after being chopped up, and mix oats or some other dry food with them. But in feeding hogs with them, no precautions are necssary. It is well known that corn stalks, when near maturity, especially if grown upon manured lands, contain a considerable portion of saccharine matter, the property which renders the sugar beet so valuable as a food for cattle; and it is supposed that molasses will fatten hogs faster than any other food; and hence it may be accounted, why the corn stalk proves to be a valuable food. It is, however, not useful for this purpose, until about the time the fodder is ripe, and then, not longer than until about the time the stalk begins to become dry. Yet, as planters generally cultivate fields, or lots of different ages, they may always have a supply for the months of August and September.

"My plan for using the green corn stalks for horses or mules, is to cut down the corn stalks even with the ground, and chop stalk and ear about two inches long, with a hatchet, upon a block of wood, brine them, and throw them in one part of the trough, and chopped oats in another part, and to keep a constant supply of the green corn stalk by the horse or mule. If they are worked, to give them a little old corn at 12 o'clock. This plan will keep a horse, not worked hard, fatter than old corn and fodder. I estimate a stalk of corn, with its ear made upon manured land, equal to three ears without the stalk: and, if the summer is dry when produced, to four or five ears; because, when the ear is injured by drought, the stalk is always more saccharine and nutritious.

"To feed hogs, it is sufficient to cut stalk and ear after the fodder is pulled, and throw them over the fence whole, and let them eat them at leisure. One stalk each day in a crab-grass field, if the stalk is from manured land, will keep an old hog fat, if the stalk is in its juicy saccharine state."

Our attention has just been brought to the following in the July number of the Farmers' Cabinet:

CURING OF BACON.

The Editor of the Southern Planter says, in his number for May, that every body in Virginia knows how to make good bacon, and if any of his northern friends will cross the Potomac, he will satisfy them that the art is confined to the south. What a happy law of our nature it is, that we are all pretty sure to be endowed with enough of self-complacency to make us contented with our own ways! But did the 'Planter' ever cross the Delaware—did he ever eat of a real Jersey ham, fed, cured, and cooked in old Gloucester? Why there is as much difference between the rich delicacy of its taste and flavor and those of a Virginia ham, as there is between veal cutlet and fried sturgeon—between a young capon and a five year old rooster! Did he ever taste real *Jersey pork?* We do not go the whole hog here, in relation to bacon, as they do down south; they smoke all—we cure the side differently from the ham, shoulder, and jowl; these we smoke, the *side* we eat as pork. I remember being once very seriously asked, if it was true that we Jerseymen ate a part of our swine's flesh without smoking? and the answer was received with incredulity! But this is a digression.

I started to give friend Botts, through the Cabinet, the Jersey mode of curing hams; and if it is once properly tried, he may lay that of his correspondent 'D.' quietly on the shelf; but as 'D.'s' recipe will accompany this, the readers of the Cabinet can choose between them. The Jersey mode is, to every 80 lbs. of hams, take 4 ounces brown sugar, 3 ounces saltpetre, and one pint of fine salt; pulverize and mix them thoroughly; rub the hams well, and lay them on boards for 36 or 48 hours; then pack them in casks, adding two quarts fine salt to every 80 lbs. of hams. In 15 days they may be hung up to smoke.

The Virginia mode is, "Put to each joint a large tea-spoonful of saltpetre; rub each piece well with salt on both sides, and pack them away in a hogshead with holes at the bottom, to let off the brine; let them remain for five or six weeks; then take out, brush off the salt, rub well with hickory ashes, and hang each piece in the smoke-house so as not to touch each other. Smoke eight or ten days, successively, and occasionally in damp weather; use small chips, but avoid pine." In my opinion, small chips of green hickory or apple trees, form the best material for smoking; and the best mode of keeping through summer is to tie up in bags with a little hay on the flesh side, suspending them out of the way of rats and mice.

If the 'Planter' would come over about new-year's, we should be able to show him some real Jersey hogs—like those thirty which were slaughtered last year at the Burlington County almshouse, averaging over 400 lbs. each; or those of which Homer Eachus speaks in the number of the Cabinet for May, one weighing 966½ lbs. after being neatly butchered, and the three averaging 925 lbs. which, although not exactly what we are in the habit of calling "lovely creatures," yet well deserve this special notice. T. Z.

We have heard and seen a good deal of the assurance of mankind, but that any one could be found with effrontery enough to deny the supremacy of a Virginia ham, we had never dreamed; and then to oppose to its delicate pretensions the gross properties of *greasy*

Jersey Pork, faugh! "The offence is *rank*." But "an ounce of fact is worth a pound of assertion." If this unknown T. Z. has a name, he has a palate also. Now if he will give us the one, we will tickle the other with a ham of our correspondent's curing, that shall induce him to abjure fat Jersey Pork for the balance of his life. Thus the creation of a new desire, which he will not be always able to gratify, shall be his punishment for the treasonable doubts he has dared to express.

With great pleasure we comply with the request of the Hanover Agricultural Society to give circulation to the following report of their proceedings with respect to their spring exhibition. We hope to have the pleasure of recording many similar ones in other parts of the state before the period arrives.

HANOVER SPRING FAIR.

At a meeting of the Hanover Agricultural Association held at Negrofoot, on the 12th of August, 1842, the meeting having been called to order by the President, the Executive Committee reported the following schedule of premiums which was adopted.

PREMIUMS.

For the best	Saddle Horse,	$5	00
" "	Span of Farm Horses,	5	00
" "	Brood Mare,	5	00
" "	Colt 2 years old,	2	50
" "	Filly do. do.	2	50
" "	Bull,	5	00
" "	Milch Cow,	5	00
" "	Yoke of Oxen,	5	00
" "	Boar,	5	00
" "	Sow and Pigs,	5	00
" "	Buck,	5	00
" "	Lot of 6 Ewes,	5	00
" "	Domestic Carpet not less than 25 yards,	5	00
" "	Domestic Sewing Silk not less than 1 lb.	2	50
" "	Domestic Cloth not less than 7 yards,	2	50
" "	Domestic Counterpane,	2	50
" "	Do. Silk Hose,	2	50
" "	Do. Flannel, not less than 7 yards,	2	50
" "	Butter not less than 5 lbs.,	2	50
" "	Jack,	5	00
" "	Pair of Mules,	5	00
" "	Plough,	3	00
" "	Wheat Fan,	5	00
" "	Churn,	2	00
" "	Specimen of domestic Wine, 1 gal.,	2	50
" "	Essay on Root Culture,	5	00
" "	Essay on Making, Preserving and Applying Manures,	5	00

The Committee further reported the following rules which were agreed to.

1. No one but a member of the Society or their household shall be allowed to contend for any premium.

2. Every competitor for any premium, shall file with some member of the Executive Committee, his intention of competing for any premium, at least sixty days before the time of exhibition; and those who enter for the different stock premiums, shall at the same time furnish the pedigree and age of the animal, as far as practicable, with a schedule of its keep, and all other particulars calculated to afford any knowledge interesting or beneficial to the Society.

3. The different Committees in awarding premiums, shall take into consideration the age, keep, form and size of the different animals entered for premiums, and award the premiums to those which are best, relatively considered.

4. Should the Committee or any of them deem the stock or articles entered for a premium unworthy of a premium, it may be withheld.

On motion, the Committees for awarding premiums were chosen as follows:

Committee on Cattle—N. Cross, W. D. Winston, Edwin Snead.

Committee on Horses and Mules—George N. Clough, Wm. L. White, Boling Vaughn.

Committee on Swine—Moses Harris, Carter Berkeley, Jas. T. Sutton.

Committee on Sheep—R. B. Hendrake, Edw. Sydnor, Albert S. Jones.

Committee on Dom. Fabrics—Jos. Tally, Jas. Winston, H. M. Wingfield.

Committee on Farm Implements—Jno. Haw, Jos. Hooper, Chas. Vest.

Committee on Products of the Dairy—C. B. Jones, Thos. H. Godwin, Wm. H. Howard.

Committee on Essays—Edmund F. Wickam, Jno. D. G. Brown, Edm. Crenshaw.

Committee on Wine—Wm. Carter, Jno. P. Harrison, Roscoe Lipscomb.

On motion, *Resolved*, That Jesse Winn, Henry Robinson, Richard F. Darracott, Wm. H. Howard, Jas. T. Sutton, C. W. Dabney and Jno. D. G. Brown, act as Delegates from this Association to the Henrico Agricultural Fair, to be held the 20th October next.

On motion, the meeting adjourned to meet again on the 28th day of September next, at Hanover Court House, court day, at 11 o'clock, to consider matters interesting to the Society, and especially to fix on the place of holding the Fair next spring.

RICHARD F. DARRACOTT, *Sec'y.*

From the Farmers' Cabinet.

THE TARE CULTURE.

At a late meeting of the Philadelphia Agricultural Society, a member inquired if any one present could speak experimentally on the culture and value of the tare or vetch, which is in such very general use in England, where the summers-oiling system is adopted; remarking, that from all accounts the plant must be aston-

ishingly productive as well as nutritious. Having myself employed it for that purpose very largely, and for many years, I would say, its productiveness has never yet been overstated, or its value overrated, as food for all kinds of cattle. Horses, milk cows, fatting beasts, sheep, and hogs, will grow fat while feeding on it, and the older it grows the more valuable it becomes, as the seed when formed in the pod, is far superior to oats or any other grain for the purpose of cattle feed; the seeds are black, and the size of very small peas. The crop is used for soiling by cutting while green and taking it to the stables; it is sometimes fed off by sheep, confining them on it by means of a temporary fencing or hurdles; cattle are not liable to become hoven while feeding it in any state of its growth; on good land it has been known to reach the height of three feet and even more, producing as much as twelve tons of green food per acre, which, when well dried, will yield three tons of the most valuable hay on the farm. The first sowing takes place as soon after harvest as possible in England, upon land designed for the wheat crop the next autumn, with the winter variety of seed, which can easily be distinguished from the summer tare, as it is smaller, rounder, and blacker; these will bear the severity of the winter; rye is often mixed to enable the crop to stand up, when it attains a considerable height, but a sprinkling of wheat has been found best for this purpose, as it remains longer succulent in the summer. The crop from this sowing will be fit for cutting for soiling in May, and the stalks if left in the ground will afford a second growth for sheep feed; but as the tare is a fallow crop, it is the best management to cut all off and plough the land deep as soon as the crop is removed, well working it and cleaning it during the summer, preparatory to wheat sowing, early in the autumn, after a dressing of well prepared compost, if this has not been given to the tares—a far better arrangement for both crops. The next sowing is with the summer variety of the tare, as early in March as the season will admit, on land that has been ploughed preparatory in the autumn or winter; again in April another crop is sown, and, if necessary, two other sowings might take place, the last so late as the end of June, that so a succession of this most valuable crop might be secured for the whole of the summer, and until the end of September. Such crops produce immense quantities of manure, which is carried from the sheds and composted for dressing others; turnips, for instance, which may be sown on the land from which the first crop of tares had been carried, and fed off in time for wheat sowing in the autumn. It must not be forgotten that the richer the land, the greater will be the crop of tares, and none will pay so amply for manure; but when the crop is very heavy, there is less chance of obtaining good seed, and if that be the object, it is recommended to mow the first crop early for soiling, and permit the second growth to stand for seed, which is sometimes a precarious business, nothing being more uncertain; I have purchased seed at a guinea and a half a bushel, and sold the next year's produce obtained from it at six shillings a bushel! When the price of seed is moderate, the quantity sown is two bushels or two and a half per acre, but whatever the price may be, it will be repaid in the crop, if the land be in good heart. As much as thirty bushels of seed per acre has been obtained, but fifteen bushels, and often half that, is more common. Under a heavy crop of tares, the land will be found perfectly clean and mellow, and will turn up like an ash heap: and there is no question with me, that the crop may be raised with success in this country, if well cultivated on good land, rather stiff in its nature, and lying cool.

With regard to the value of the tare for soiling, it had been calculated that ten times more stock might be kept on them than on any other commonly cultivated crop; horses require no corn or any other food, and cows give more butter while feeding on them than on any other food whatever. Is it not strange, that no regular experiment on an extensive scale has yet been made on such an invaluable crop in this country?

Can any of our readers tell us of any experiments made on the cultivation of tares?

The following is the recipe of Dupuytren, the celebrated French physician, to prepare a pomatum to prevent baldness, and promote the growth of the human hair. It is much esteemed by the medical faculty, one of whom furnished it for the columns of the Planter. Since its receipt, it has been applied, with great success, to an inveterate tetter on the head of a little boy in the Editor's own family.

Take of Beef Marrow, (well tried,)	8 oz.
Sugar of Lead, (well pulverized,)	1 drachm.
Old Brandy,	1 oz.
Oil of Cloves,	15 drops.
Tincture of Cantharides, (Spanish Flies,)	15 scruples.

Mix intimately, and rub the bald part, or that likely to become so, every evening.

M. D.

THE FARMERS' ALMANAC.

We have received from the Editor of the Western Farmer a little work of an hundred pages to which the above is the most appropriate title. Instead of the comic foolery which is usually added to the necessary details of an almanac we have here a capital fund of agricultural information illustrated by a number of ex-

cellent engravings. The work is very attractive in appearance and could no doubt be extensively sold in this market at the low price at which it is afforded.

NORTHERN SEEDS.

It is generally known that plants from seed brought from northern latitudes will mature much more rapidly, at a given southern latitude, than plants from seeds produced in the same southern latitude; and, *vice versa*, that seed brought from the south to north vegetate and mature much slower, than the seed of the same description produced in the north. We this year planted muskmelon seed from South America, and watermelon seed from Palestine: and the latter were about three or four weeks later in ripening than the watermelons from the seed of this latitude, while the muskmelons, we should judge, are full five or six weeks later than those from the ordinary seed. Wheat from the Black Sea escapes the rust much better than our native wheat and the reason assigned is, that, being from a cold climate, it matures before the hot and rainy weather which produces rust sets in. We advise the farmers in the west and south to get their seed wheat as far north as possible. Wheat from Maine, New York, Michigan, or Wisconsin, would be almost certain to escape rust in the more southern States, and would not be troubled by the fly in the spring. Irish potatoes for seed should also be brought from high latitudes. The produce will be earlier and better than from the potatoes of the neighborhood.

Louisville Journal.

TO KEEP BUTTER.

A majority of butter makers are opposed to washing their butter in water soon after it is churned, and fancy they would injure it by the operation; they therefore endeavor to separate the butter-milk by working the lump of butter, by repeatedly changing the position of the particles of matter so as to let it run off. Some beat pound lumps in their hands; others use little shovels and fear to let the butter come in contact with the warm hand, for all melted particles are found to be injurious. Salt is mixed in, and much precaution is used to exclude this matter which is so liable to sudden putrefaction.

But a far better mode of casting out this foul matter is now practised by those who best understand how butter should be prepared to be kept. The Dutch know it, and the Scotch have excelled in it; and butter has been so put up that it has been for years kept sweet. It must be admitted by all who consider the subject, that as oil, or any thing oily will not unite with water, we need not fear that we can wash out any of the goodness of the article. We may use water enough to wash the butter away, but we can wash no goodness out of it. When the butter is first gathered in the chum, the butter-milk must be turned off and cool fresh water turned in, and then the butter should be dashed again in order to get out all the particles of milk that remain in the little crevices or eyes of the butter. This water may be then turned out and a fresh supply substituted for it. This must be dashed like the first, and you will find but little milky matter in it. This dashing in two waters will be found sufficient, though more will not hurt the butter.

Now, as this operation has taken place while the butter was soft, all parts of the butter have come in contact with this flood of water, and if any moist particles are still left in the crevices, they will consist chiefly of water. Then salt the butter, and this water becomes brine. You have brine, therefore, if anything, as a substitute for that milky matter that soon grows putrid if left among the butter; and brine, made well, is the best thing with which butter comes in contact. Yet, as this brine is not always perfectly free from the milk, it can be wholly absorbed by any other substance, we feel more sure our butter will keep sweet. We, therefore, make the salt as dry as possible. We let all the moisture evaporate from it, either while we place it in the sun or let it stand by the fire. This salt will then absorb all the remaining moisture in the butter, and leave us nothing but purity and sweetness.

As the cream before churning may not have been well tended or stirred every day as it should be, or as some sour particles may adhere to our lump of butter, it is prudent to use a very small quantity of saltpetre and of sugar in our salt. One tea-spoonful of saltpetre and two of loaf sugar will be sufficient for a dozen pounds of butter, and these will tend to correct any acid or impurities that may have intruded.

Cultivator's Almanac.

A CERTAIN CURE FOR FOUNDER IN HORSES.

Take a large kettle of water and make it boil. Lead the horse to the kettle, if he be able to walk; if not, take the water to the stable. Commence with a swab and wash the left fetlock before, then the right, then the fetlocks behind, then wash the legs in the same manner, then the shoulders and body, rub the horse dry and he will be well in a few hours. There is no danger of scalding the horse, if the above direction be pursued. This remedy is on the authority of one of the best farriers in this place, and is worth to every farmer double the price of his subscription to this paper.

Jacksonville Illinoian.

We have used hot pot-liquor as above directed with great effect, and think it very probable that the virtues of the remedy are to be attributed to the warm bath rather than to any peculiar properties of the liquor.

APPLES FROM THE SEED.

The general opinion has been that there was no certainty of obtaining a particular apple by planting the seed. We extract the following singular statement on this subject from Deane's Georgical Dictionary, a scarce work of very great and deserved celebrity:

"It is a general complaint, that the finest apple trees of this country have degenerated, and that many of the best sorts have entirely disappeared from our gardens and orchards. It would not be difficult to show that every successive grafting deteriorates the part engrafted; or to point out an effectual method of retaining good apples in this country without the trouble of grafting, as in every perfectly ripe apple there will be found one and sometimes two round seeds; the others will have one or more flatted sides. The round ones will produce the improved fruit from which they are taken, and those with the flatted sides will produce the fruit of the crab upon which the graft was inserted. It requires not a long time to ascertain the difference; for if a circle is drawn in rich ground, and the flat-sided seeds planted therein, and the round seeds in the centre, the variation of quality will be discovered in two or three years. The first will throw out the leaves of a crab, and the latter the leaves of an improved tree, distinguished in shape and fibre, and with a woolly appearance; and in due time the fruit of each will put every thing beyond doubt. It is observed that the seeds of crabs (being originals) are mostly if not altogether *round*."

MISCELLANY.

TOBACCO.

We collect the following curious account of this celebrated plant from a history published by Mr. Thos. Harriott, who made a voyage to Virginia, along with Sir Walter Raleigh, in 1586. It is a little singular, that tobacco, which is now considered so injurious to the health, should have been recommended, at that day, for its medicinal qualities. It only proves that then, as now, novelties were invested with charms, for which they were indebted to the imagination of the first discoverers, rather than to their intrinsic merits.

It is a curious fact that when the civilized man met the savage, the result should have been a mutual interchange of one great inebriating stimulant for another. In exchange for our gift of "strong water," they returned us the curse of tobacco.

The following is the extract to which we have alluded.

"There is an herbe which is sowed apart by itselfe, and is called by the inhabitants *uppowoc:* in the West Indies it hath divers names, according to the several countries and places where it groweth, and is used: the Spanyards call it *tobacco.* The leaves thereof being dried and brought into powder they use to take the fume or smoke thereof, by sucking it through pipes made of clay into theyr stomack and head: from whence it purgeth superfluous fleame and other grosse humors, and openeth all the pores and passages of the body: by which means the use thereof not only preserveth the body from obstructions, but also, (if any be, so that they have not beene of too long continuance) in short time breaketh them: whereby theyr bodyes are notably preserved in health, and know not many grievous diseases, wherewithall we in England are oftentimes afflicted.

"This *uppowoc* is of so precious estimation amongst them, that they thinke theyr gods are marvelously delighted therewith: whereupon sometime they make hallowed fires, and cast some of the powder therein for a sacrifice: being in a storme upon the waters, to pacifie theyr gods, they cast some by into the ayre and into the water: so a weare for fish being newly set up, they cast some therein and into the ayre: also after an escape of danger, they cast some into the ayre likewise: but all done with strange gestures, stamping, sometimes dancing, clapping of hands, holding up of hands, and staring up into the heavens, uttering therewithal, and chattering strange words and noises.

"We ourselves during the time we were there used to suck it after theyr manner, as also since our returne, and have found many rare and wonderfull experiments of the vertues thereof: of which the relation would require a volume by itselfe: the use of it by so many of late, men and women of great calling as else, and some learned physicians also, is sufficient witnesse."

FATTENING.

The influence of food in promoting extraordinary growth is not confined to the inferior animals as was proved by the cruel experiment of Dr. Berkeley, bishop of Cloyne. He selected an orphan child of the name of Macgrath, and by dint of feeding, at the age of sixteen he had grown to the height of seven feet, and his weight was in proportion, but his organization, says our author, had been so exhausted by this forced process, that he died in a state of moral and physical decay at the age of twenty.

ELEGANT REPROOF.

The rudeness so well reproved in the following anecdote is not yet banished from the convivial board, and often affords an opportunity for a repetition of the story.

Lord Kelly, celebrated in the last age for his love of music, was "not only witty in himself, but the cause of wit in others." Mr. A——B——, a Scotch advocate, a man of considerable humor, accompanied by great formality of man-

ners, happened to be one of a convivial party, when his lordship was at the head of the table; after dinner he was asked to sing, but absolutely refused to comply with the pressing solicitation of the company; at length, Lord K—— told him he should not *escape;* he must either sing a song, tell a story, or drink a pint bumper. Mr. B——, being an abstemious man, chose rather to tell a story than incur the forfeit. "One day," said he, in his pompous manner, "a thief, in the course of his rounds, saw the door of a church invitingly open; he walked in, thinking that even there he might lay hold of something useful: having secured the pulpit cloth, he was retreating, when, lo! he found the door shut. After some consideration, he adopted the only means of escape left, namely, to let himself down by the bell rope; the bell of course rang; the people were alarmed, and the thief was taken just as he reached the ground. When they were draging him away, he looked up, and emphatically addressed the bell, *as I now address your lordship.* "Had it not been," said he, "for your *long tongue*, and your *empty head*, I had made my *escape.*"

TIGHT LACING.

We congratulate the female world upon the dawning prospect of their emancipation from the cruel shackles of the tyrant FASHION. We congratulate Beauty and Health upon the great victory they are about to achieve, through the aid of science and reason, over the ogres of Distortion and Disease.

Let us lend our feeble aid to our mothers, daughters and sisters, in the mighty effort they are making for emancipation. At least, let us cheer them on in the glorious struggle. The Citadel of Paris, the stronghold of FASHION, has already surrendered. A correspondent of the National Intelligencer writes from that city, "The artists of taste in Paris have resolved to leave Dame Nature to her own discretion, and from this out the fair sex are to breathe freer and easier. The most cruel bondage under which the sex have so long groaned is broken; the female lungs can now run riot in the room which is left them to play, and the heart has 'scope enough and verge to beat.'"

The march of freedom is onward, and we hope soon to see her bright face dispelling the thraldom of our own dear and beautiful countrywomen.

EDITORIAL.

We must beg to plead the indisposition of our engraver as an apology for the paucity of cuts in the present number. On this account we have been compelled to lay over several interesting communications requiring illustration.

Richmond Markets, September 14th, 1841.

BRANDY.—Otard, Dupuy & Co. $1 75; A. Seignette $1 35 to $1 40; Imitation 25 a 28 cents; Virginia Apple 55 a 60, stock light, demand fair; Northern Apple 29 a 32; Peach dull at 75 cents a $1 50.

BUTTER.—Mountain Butter, wholesale 12 1-2 a 16 c. for firkin; 20 cents for roll.

CATTLE MARKET.—Cattle on the hoof, $5 a $7 per hundred pounds according to quality; Rough Fat 5 a 7 cents per lb. Mutton $3 a $6, according to quality.

FISH.—Mackerel, No. 3, $7; Herrings, No. 1, N. C. $3 50; No. 2, $2 87 1-2; Potomac cut $3 25; Shad, $8 50 per barrel.

FLOUR.—No recent sales of City Mills. Holders generally ask $7 for country—light sales yesterday and to-day at $6 75.

GRAIN.—Wheat, $1 30 a $1 35 per bushel; Corn 65 cents per bushel; Oats, 42 cents per bushel.

LUMBER.—Clear white pine $36; refuse clear $32; merchantable $22; refuse, last sale at $14; flooring $15 a $25 per M.

MEAL 75 cents per bushel.

PROVISIONS.—Bacon, Smithfield, of good quality, is scarce, and would command 8 cents; Todd's 7 1-2 a 8; Western, of good quality, 6 1-2 a 7; Extra sides 6 a 7; shoulders 4 a 6 cents. Demand fair and supply not large. Lard, Baltimore, No. 1, 8 a 9 cents; retail demand only. Virginia cured 8 1-2 a 9 cents.

PLASTER.—Last sales at $3 50.

TOBACCO.—Market very heavy, with decline in prices.

CLOVER SEED $7.

ORCHARD GRASS $2 75.

TIMOTHY $4 50.

HERDS GRASS $1.

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THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.* | Tillage and Pasturage are the two breasts of the State. *Sully.*

C. T. BOTTS, Editor. **Opposite Merchants' Coffee House, Main Street.**

VOL. I. RICHMOND, OCTOBER, 1841. No. 9.

DRAINING.

We hope we shall not be considered pertinacious in our frequent allusions to this improved mode of Agriculture. Satisfied of the importance of the subject, we desire most earnestly to impress its value upon our readers. The following letter comes from the pen of the lamented Buel, one of the soundest minds and clearest heads that this country has ever produced. We shall not fail to avail ourselves of every opportunity to second his views upon this important point:

KEEP YOUR LAND DRY.

The importance of draining is not duly appreciated, nor its practice well understood among us. Although water is indispensable to vegetation, too much of it is as hurtful as too little. It is necessary to the germination of the seed, to the decomposition of the vegetable matter in the soil—to the transmission, of the food from the soil to the plant—to its circulation there—and to the maturity of the product. All these useful purposes are defeated, where water remains in the soil to excess—the seed rots, the vegetable matter which should serve as the food of the crop, remains unsoluble, in consequence of the absence of heat and air, which the water excludes; or, if the seed grows, the plant is sickly, for want of its proper food, and there is consequently a virtual failure in the harvest. It is not from the surface only that we are to determine whether land is sufficiently dry to support a healthy vegetation; but we are to examine the surface stratum, into which the roots of the plants penetrate, and from which they draw their food. If this is habitually wet—if it grows marshy plants—if water will collect in a hole sunk fifteen inches below the surface—the land is too wet for cultivated crops, and means should be adopted to render it more dry. From my partial acquaintance with this country, I feel assured that much of your best land is rendered unfit for tillage, or the growth of the finer grasses, by reason of the excess of water, which passes or reposes upon the sub-soil unnoticed by the cultivator. These lands are denominated cold and sour, and they truly are so. Cold, sour lands are invariably wet lands below, if not upon the surface. But if the superfluous water were judiciously conducted by efficient under drains, (for the construction of which you possess the best materials in abundance,) these lands would be rendered warm and sweet, and highly productive, and the outlay would be repaid by the increased value of two or three of the first crops. Wet lands are generelly rich lands, abounding in vegetable matters, which water has preserved from decomposition, but which readily become the food of plants, when the water is drawn off. Let me imagine a case, which I am sure will be found to exist in many parts of your country. There is a slope of a little hill, half a mile in extent, terminating in a flat forty rods wide, through which a brook meanders. The soil on this slope and in this flat is of a light, porous quality, six to twelve inches deep, reposing on a sub-soil impervious to water, as clay, rock, or hard-pan. By soil, I mean the upper stratum, in which vegetable matters are blended with earthy materials, and which constitutes the true pasture of plants. Near the top of this slope, all along on a horizontal level, or perhaps lower down, spouts or springs burst through the sub-soil, a thing very common in hilly districts, the waters from which finding an easy passage *through* the loose soil, spread and run down the slope, and *upon the sub-soil*, and through the flat, till they find their level in the brook. A thermometer plunged down to the sub-soil, will indicate, at midsummer, a temperature probably not greater than sixty degrees, whereas to grow and mature many of our best farm crops, we require a heat in the soil of seventy or eighty degrees. How shall we remedy this evil, and render this land profitable to the occupant? Simply by making an underdrain or drains, in a gently inclining direction; a little below those spouts or springs, and, if practicable, somewhat into the sub-soil. These will catch and conduct off the spouting waters, and by laying the lower plane dry and permeable to heat and air, develope all its natural powers of fertility.

I will suppose another case—that of a flat surface, underlaid by an impervious sub-soil. This is rendered unproductive or difficult to manage, by *stagnant* waters. The rain and snow waters, penetrating the soil, are arrested in their downward passage, by the sub-soil, which not having slope to pass them off, they remain, and stagnate, and putrefy, alike prejudicial to vege-

table and animal health. The mode of draining such grounds and rendering them productive and easy management, is, first to surround the field with a good underdrain, and to construct a sufficient open drain from the outlay to carry off the waters. Then with the plough, throw the land into ridges of twenty to thirty feet in breadth, according to the tenacity of the soil, in the direction of the slope, and sink an underdrain in each of the furrows between the ridges, terminating them in the lower crossdrain. The materials of the underdrain, which are generally stones, should be laid so low as to admit of the free passage of the plough over them. The superfluous water, by the laws of gravitation, settle into these drains, and pass off, and the soil becomes dry, manageable and productive. An acquaintance called upon a Scotch farmer whose farm had been underdrained in this way, and being informed that the improvement costs sixteen dollars an acre, tile having been used, remarked that it was a costly improvement. "Yes," was the farmer's reply: "but it cost a deal mair *not to do it*," which he illustrated by pointing to an adjoining farm, like situated, which had not been drained, and was overgrown with rushes and sedgegrass, and then to his own fields teeming with luxuriance and rich in the indications of an abundant harvest.

I have dwelt upon the subject of draining with more detail, because I have personally realized its benefits, and am sure it may be extensively gone into with certain prospect of reward.

Judge Buel.

FLOWERS.

We have repeatedly advocated the cultivation of flowers. It is an innocent and elegant amusement, and although it may not be so productive of *thrift*, as some other modes of employment, it is productive of refinement and happiness, which thrift cannot always procure.

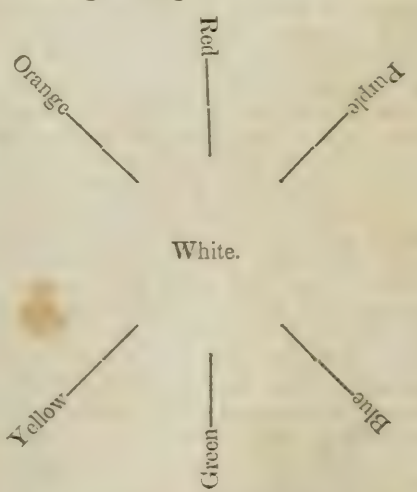
To the lover of flowers, and who does not love these beautiful gifts of nature, the following treatise will be extremely interesting. But the principles here laid down, for the proper assortment of colors, is general in its application, and will serve as well to guide the dashing belle in the arrangement of her wearing apparel, as the gentle maiden in the disposition of her flower garden:

THE FLOWER GARDEN.

Arrangement of Flowering Plants.

In a recent number of the Gazette we offered some observations on turning out flowering plants into beds and borders, with reference to soil and exposure; and we shall now add some remarks on the arrangements of such plants in beds and borders generally, with a view to the colors of their flowers.

All scientific directions respecting the arrangement of colors are founded on a law of nature, the truth of which every one can prove for himself, viz. that every color has what is called its complimentary color, and which complimentary color, when placed adjoining it, affords most satisfaction to the eye, or, in the language of artists, contrasts better with it than does any other color whatever. To discover what color is complimentary to any other color, take a piece of white paper, say a page of letter paper, and place on the middle of it a round blotch or patch (a colored wafer for example,) of black, and also of the color of which you wish to find the complimentary one. Then fix the eye intently on the patch of black for a few seconds, and afterwards for a few seconds on the color for which you wish to find the complimentary one; and on the white paper round the latter color, and close to it will be seen a faint shade of the complimentary color. Suppose the circular patch to have been blue, then you will find it surrounded with a narrow zone of orange, which color is therefore the complimentary one of blue, or that which pleases best when placed beside it; or, in other words, contrasts best with it. In like manner red is the complimentary color of green, and yellow of purple. If we imagine the six primitive colors, together with white, which for gardening purposes, is to be considered as a color, placed as below, we shall form a source from which rules can be drawn for the arrangement of colors in every case that can occur in the practice of gardening.



In this diagram, or formula, white is placed in the centre, because it forms a suitable contrast with every other color, becoming in fact, to a certain extent, the complimentary color of whatever color may be placed adjoining it. Supposing you have a flower of any particular color,

and wish to know what other flower will best contrast with it, then look in the diagram for the color which comes nearest to that of the flower of your plant. Suppose it to be straw color, then yellow being the nearest color, look opposite to it, and you will find purple, which is its complimentary or contrasting color. In like manner blue will be found opposite to orange, which two colors assort better together than with any others, and so on; white being in the centre, and as before mentioned, assorting with all.

As far as mere color is concerned, therefore, colors may be placed in any order of succession, provided white is introduced between every two colors. If white is not introduced, then the order may be any variation which the planter chooses of blue and orange, purple and yellow, and red and green, or any of the shades of these colors; but green being the color of foliage, it goes for nothing in the arrangement of living flowers, and, therefore, white must be used as a substitute for it.

Thus far as to the harmony of colors seen in succession along a border of miscellaneous flowers, or in a row of one kind of flower, such as the dahlia or the pansy, of which there are several colors. But in many cases, another source of beauty is required in the arrangement of colors, even in a line, or in a border—that source is regularity, or the repetition of the same colors at fixed intervals. There are various reasons why regularity in form or color, as in the succession of sounds, is satisfactory to the mind; but the principal one is, that it affords decided evidence of design or art on the part of man.

The arrangement of colors in rows and in borders, if made judiciously, produces little effect on the eye of the spectator, compared with a good or bad arrangement of colors in masses; whether in one large bed of miscellaneous flowers, or in a flower garden consisting of a number of beds grouped together, so as to form a whole. If the colors do not unite in forming a whole, as well as the beds, the result will be unsatisfactory.

Not to perplex the reader with too many reasons and details, we shall briefly observe, that the two principal points in arranging colors in mass in a flower garden successfully, are symmetry, and the preference of warm to cold colors. Warm colors are red, orange, and yellow; while green, blue, and purple are cold colors. Green, therefore, being a cold color, and forming a large proportion of the surface of most flower gardens, it is not desirable to increase it, or to introduce either blue or purple flowers with it to any great extent. Every bed in a symmetrical flower garden, except the one which forms the centre, must have a corresponding bed, resembling it in color as well as in form and position. If the space between the beds are of grass, then red, yellow, and orange, or shades or compounds of these colors ought to prevail; but if the intervals between the beds are of yellow gravel, then blue, purple, and white, with their different shades and variegations, ought to be most abundant, because these, being cold colors, contrast best with the yellow, or yellowish-brown of gravel, which is a warm color.

Principles, which are applicable to the use of colors in the arts and manufactures, and even in landscape and flower painting, will in many cases, not apply in gardening, from the large proportion of green in some cases, and of dug soil and gravel-walks in others, which are continually present; but the following rules if attended to, will prevent any gross violation of propriety:

1. In all borders of uniform width, that are planted with miscellaneous flowers, let the white flowers bear a considerable proportion: equalize the mixture as much as possible throughout, and see that the same plants and the same colors, or plants and colors as nearly resembling one another as possible, recur at regular distances.

2. In borders irregular in width and in direction, the disposition of the colors may be irregular also; but still to preserve harmony and produce force of effect, white flowers should be interspersed throughout.

3. In all merely regular flower-gardens, by which we mean gardens consisting of a repetition of one or more forms at regular distances without any centre, the colors should be repeated in the same manner as the beds; thus suppose a square spot laid out in twelve parallel beds, all of the same length and width, with grass paths between them; then the colors may be—1, red; 2, white; 3, yellow; 4, purple; 5, orange; 6, blue; 7, red; 8, white; 9, yellow; 10, purple; 11, orange; and 12, blue.

4. In all symmetrical flower gardens, by which is meant such as have a centre, or centres; in other words, an axis or axes of symmetry, arrange the colors symmetrically. "Let one half the platform just reflect the other." Where the spaces between the beds are in turf, use chiefly warm colors, such as yellow, orange, and red, with their shades; but where the space between the beds are of gravel, or paved, use a large proportion of cold colors, such as blue, purple, and white.—*Gardeners' Gazette.*

ROTATION OF CROPS.

Upon an analysis of plants, so far as it has been carried, it appears, that the substances, extracted from the soil, for their nourishment, differ in different plants. Hence the necessity of cultivating, in succession, those plants that draw their nourishment from different sources. By this means the exhausted supply is regained from the store-house of nature, whilst

the rejected properties are now yielded to the new plant. Our knowledge of the chemical properties of plants is as yet very imperfect and there is no more important field of investigation in the science of agriculture. Enough has been discovered however to prove that substances enter into the composition of corn that are not found in clover, several in tobacco that are not found in wheat, &c. &c. But Professor Liebig has shown, that, even in this chemical analysis, regard must be had to the climate in which the plant was raised; since, the same plant extracts different substances in different climates. How much study and observation are required to master the profound and intricate science of agriculture!

GATHER UP ALL THE MANURE.

All the manure, of every description, around buildings, should be removed to the field, and very rich soil, not wanted in its present place for purposes of cultivation, should be exchanged for pure earth, which will be more clean, pleasant, and healthy. All decaying vegetable matter, around or near the house has an unhealthy effect, which alone is a sufficient reason for cleaning up all around the dwelling, to say nothing of the advantage of collecting manure.

Near some buildings are piles of ashes, which have been accumulating for years. They should be put on light lands. Ashes that have been leached, and have laid long exposed to rains, are still valuable. In such cases, a hard, smooth crust is formed over the top, that throws off the water, and protects the greater part of the pile from being drenched in rains.

In order to keep the air pure and sweet, the mud and filth produced from the sink should be carried away. A farmer of good taste will be careful that neatness and order prevail around his premises. This can be done by every one, let his circumstances be what they may. It costs nothing but good management, which in the end always proves to be cheap.

Yankee Farmer.

WHEAT.

We extract the following from an address delivered before a South Carolina agricultural society by Mr. J. B. Oneale, who seems to unite in his own person the two professions of farmer and miller. Speaking of wheat he says:

"The seed ought not only to be selected from a good variety, but it should be well prepared for being sown. In the first place, it should be thoroughly dried by the sun before it is put up for seed: this prevents weavils, and gives sound and healthy grains for vegetation. In the next place, sift the seed carefully with a good sand sieve: this will take out all the small immature grains. In the third place, for twenty-four hours before you sow it, soak your seed in a preparation of water saturated with about one pound of bluestone to every five bushels of wheat. Before you take out your seed wheat, which will be found at the bottom of the cask or tub, in which you soak it, skim off the floating grains and trash. When I have pursued this course, which was recommended to me by my friend, John S. Carwile, I have escaped the smut."

SIMPLE CURE FOR COUGH IN HORSES.

Two years ago (says a correspondent of the Cultivator, (one of my carriage horses had an extremely bad cough, which had continued for six or eight months; different applications were made without effect. I applied to a man who I knew dealt in horses, and had paid some attention to their diseases, for a remedy. He at once told me that he had never found any thing so effectual for a bad cough as human urine, given a few times, by discharging into a bucket of water and letting them drink it, or on their food and eat. I directed my driver to do so, and in one week the horse was completely relieved. I have frequently had it tried with the same good effect.

We copy the following from the Farmers' Cabinet, *verbatim*, because, after a careful inspection, we cannot find a word that could be omitted without loss. Such we generally find to be the style of Mr. Kinzer's communications; from which we have formed a very high estimate of his character as an enlightened, judicious, and practical farmer:

From the Farmers' Cabinet.

IMPROVED SYSTEM.—ROTATION OF CROPS.

Mr. Editor,—Although my time and attention have already been sufficiently taxed in commenting on articles contained in the April number of the "Farmers' Cabinet," yet I must say a word, by way of reply, to our agricultural friend who hails "all the way" from Hannibal, Missouri. I allude to John M. Johnson, who requests information under the above head, and is not too *modest* to enrol his real name on our list, that he may be addressed, should occasion require.

The very best rotation of crops, is a subject vastly more important than any other one connected with the farming business. As such, it has been for years to me a matter of deep anxiety and interest, the object being, to digest a system, which shall in its detail, yield the greatest immediate return, and ultimately improve the fertility of the soil;—to be an augmenting and ameliorating system—a desideratum to farmers

of more intrinsic value than a remedy for the Hessian fly and "cause and remedy" for mildew combined; because this system will prove, in its very operation, the best cure for all these evils, of any yet known. Farmers may expatiate as they please, about the cause and effect of all the ills that wheat is "heir to," yet in the main, the whole may be ascribed to a bad, exhausting, and depleting system of rotation. Take the seasons as they come, and is not the best grain found always on the richest ground, cultivation in other respects corresponding?

The inquiring farmer of Missouri, proposes to lay off his farm in eight fields; so I shall submit a system—that has cost some labor and expeperience—in tabular form; and which, if adopted in a proper spirit, may be enclosed in a frame for convenient reference. It will be observed, the ruinous practice of "wheat after wheat" is entirely obviated; I, *too, practise* what I here *preach*.

	Field No. 1.	Field No. 2.	Field No. 3.	Field No. 4.	Field No. 5.	Field No. 6.	Field No. 7.	Field No. 8.
1st Year, -	Wheat	Rye	Wheat	Clover	Corn	Wheat	Clover	Oats
2d " -	Rye	Clover	Corn	Wheat	Oats	Clover	Wheat	Wheat
3d " -	Clover	Wheat	Oats	Rye	Wheat	Wheat	Corn	Clover
4th " -	Wheat	Corn	Wheat	Clover	Clover	Rye	Oats	Wheat
5th " -	Corn	Oats	Clover	Wheat	Wheat	Clover	Wheat	Rye
6th " -	Oats	Wheat	Wheat	Corn	Rye	Wheat	Clover	Clover
7th " -	Wheat	Clover	Rye	Oats	Clover	Corn	Wheat	Wheat
8th " -	Clover	Wheat	Clover	Wheat	Wheat	Oats	Rye	Corn

Where there is not sufficient available manure, the field of oats may be fallow; but if the means of accumulating manure, on a good farm, be well husbanded, which can be done by compost to any extent, the wheat-stubble should and *can* be manured for corn, and the oat-stubble also for wheat. The second crop of clover is ploughed under, to manure the wheat. Corn, oats, and rye, all exhausting crops, it will be observed, can only occupy each field once in eight years, while each field is twice well manured with stable manure in the same term of years, in addition to the clover ploughed under. Barly may be substituted wholly or in part for oats. Being partial to the permanent pasture afforded by our native green grass, I keep an additional enclosure for that purpose, and mow both clover-fields, which, in addition to the corn-fodder, will winter a large stock, using the straw only for litter. Although formerly partial to timothy for hay, I would not now tolerate it, under the above system. My reasons are plain; clover hay made on the plan of curing in the cock (*or shade,*) instead of scattering it out to the breeze, sun, dew, and rain, I prefer to timothy hay for all purposes; while the former, belonging as it does to the leguminous class of plants, is ameliorating, and a fertilizer, the latter being of the tuberous rooted or culmiferous class of plants, exhausting the soil by feeding on the specific food of wheat, is a sterilizer. I beg to ask one question of Mr. Johnson—why does he insist on the cultivation of roots for stock in a soil so exuberant that one hundred bushels corn may be raised to the acre, and with less expense and trouble? Would the farmers of Europe, who occupy the *beet zone*, and raise beets, turnips, &c. more nutritious than we can by odds, "touch them with a ten-foot pole," as food for stock, if their climate would mature corn? Well, I myself have tried roots, and would not condemn them wholly; but I contend, the acre of ground forced by manure and culture, producing a good crop of beets, will under like circumstances, produce an equal, if not greater amount of solid nutriment, in the shape of corn. If Mr. Johnson *must* experiment with beets, they may be cultivated in his corn-field, without obstructing the above system. But mark, if the system of rotation above described, on account of furnishing the best food for stock, summer and winter, and *insuring* good crops, while it improves the soil, does not meet general favor, long after the present mania and fever for beet culture shall have collapsed, to be noticed only among the things "that have been." Perhaps I ought to add, that it is necessary on some farms, to subject parts of the land to tillage crops, to clean and clear them of binding grass before adopting this system, which was my case: it must be remembered that lime is a great auxiliary to this, the same as to other systems.

And now, Mr. Editor, aware of a partiality to beet culture for stock, I shall look out for a censorial notice from some ready pen; nevertheless, I shall not be *easily* driven from my ground.

W. Penn Kinzer.

Springlawn Farm, Pequea, Lancaster Co. May, 1841.

For the Southern Planter.

SHELTERS.

Mr. Editor,—Are farmers aware of the interest that may be obtained from a judicious outlay for good shelters? I asked a friend, with whom I was riding the other day, why it was

that our farmers did not spend more money in providing coverings for their stock, implements, &c. He replied, that he could account for it only by the fact, that, generally speaking, those, who had been farmers for any length of time without such provisions, had necessarily gotten into that situation, that they had very little to spend in any thing. There was much of truth in that assertion. He can never be a thriving man who, permits his stock to suffer from the inclemency of the weather, or his implements to be exposed to the destroying effects of alternate rain and sunshine. To say nothing of the inhumanity of the man, who fails to provide for the comforts of the poor brutes entrusted to his care, can there be a more false economy than that which exposes them to suffering and disease for want of the expense of comfortable housing? Sir Jonah Barrington says, that, sometimes, the surest way to avoid danger, is to meet it plump; and so I say, that often the surest way of saving money, is to expend it.

A prudent man wont have a pair of spectacles without providing a case for them, and a sensible farmer will not have a plough or a harrow, without having a covering for it. But above all, let me entreat my brother farmers to provide good and comfortable quarters for their stock of all kinds. Let them be assured that they will find a most ample return, in their consciences, as well as pockets, for any expenditure that they may make in this behalf. The food that will be saved, the first winter, will more than pay the expense; for it is a fact, and a reasonable one too, that an animal, kept warm and comfortable, will keep fat on half the food that is necessary to maintain one exposed to the rains and sleets of the pitiless heavens.

In an early number of your excellent periodical, which, I believe, is destined to be invaluable to the farmers of Virginia, a most excellent and economical plan of building is described. It was adopted by one of my neighbors, and has given him and his visitors great satisfaction. I know of nothing that can be made as cheap, that is likely to answer the purpose so well. But let it cost what it will, I repeat, he is no good farmer that is not provided with good stabling. If he cannot provide for all, the good man, or even the provident man, will dispose of some, that he may take care of the rest.

When I speak of shelters, I do not mean the miserable affairs made of brush and corn-stalks, against which poor tucked up cattle are seen to creep for protection against the northern blast. Not at all. I mean good, warm stabling, in which an ox will neither know nor care whether it is snowing, raining, or blowing without.

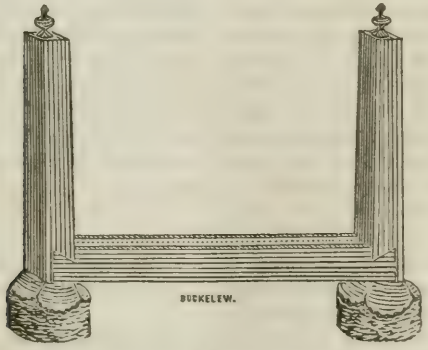
With many wishes for your unbounded success, I remain

Your friend, G***** L***.

Hanover, Sept. 1841.

For the Southern Planter.

GATE.



Mr. Editor,—As you have in your early numbers afforded me much information upon the subject of gates, in return, I send you what I have found, by experience, to be an excellent plan for setting gate posts. The drawing is intended to represent two posts, with the fixtures ready to go in the ground. Just above the butt, on each side, a piece of plank twelve inches wide, and two inches thick, is tenoned on the posts with a dove-tail; the distance between the shoulders being, of course, regulated by the intended width of the gate. By this simple contrivance, great permanency is obtained for the proper position of the posts. It is evident that they can neither approach nor recede, and, since the plank is sunk beneath the surface of the earth, which ought to be well rammed on both sides of it, the posts are guarded against the

effect of a side blow, as from a wheel, by the mass of earth that must be moved before they can yield.

Your readers will find this fixture, I assure you, worth ten times the additional labor it will cost them.

Your obedient servant,

A COUNTRYMAN.

For the Southern Planter.

AGRICULTURAL SOCIETIES.

I am much pleased, Mr. Editor, with your suggestion of a frequent report from agricultural societies. I conceive that, if in every county a society was organized, and an executive committee appointed, whose duty it should be to report monthly, for the columns of the Planter, an abstract of all the interesting facts that may have transpired in their district, a fund of information might be collected, valuable and interesting beyond all precedent. I mention the Planter particularly, because you were the first to suggest such a scheme, and because your paper, from its price alone, must soon be, if it is not already, the most widely disseminated in the State. Is it not practicable to organize such a system? Will not the Executive Committee of Henrico set the example? So apparent would be the advantages, that I believe it would be immediately followed throughout the State. Then, instead of having to rely upon hap-hazard communications, without a name, and often without foundation, you would be furnished, regularly, with facts from the most responsible sources. What a valuable record the Planter would become. It would be worth its weight in gold.

Try, Mr. Editor, and see if you cannot, to a certain extent at least, effect this desirable object.

Your friend, D. S.

The plan proposed by our correspondent is certainly the one, above all others, calculated to enrich the columns of the Planter, and of course to benefit its readers; these, we hope, will soon compose the great mass of the agricultural community in the State of Virginia. So far, therefore, patriotism, as well as self-interest, leads us to hope that his views may be realized. The plan is certainly feasible, and the object most important. Its value to the agricultural interest of Virginia can hardly be estimated. It only needs a little spirit and enterprize to effect it. Shall they be wanting in such a cause? For our part, we will furnish twenty copies of the Planter, gratis, to any society whose executive committee will undertake to report to us a monthly summary of agricultural memoranda.

There will be no difficulty or trouble in making such a report. Practice will soon render it perfectly simple. To general statistical facts, may be added any thing of particular interest. For instance, about this time, might be reported the quantity of wheat, rye, and grass seeded, at least, whether the quantity is more or less than an average—whether the seeding has been late or early—the quantity of corn harvested, &c. with a relation of any particular fact or experiment that may have come to the knowledge of the committee. Several societies, both in this country and in Europe, are in the habit of publishing such monthly reports at considerable expense, and they have been found to be records of the most inestimable value. We propose a cheaper mode of effecting the same object, and, although, we certainly remain the obliged party, still the authors of these reports will find themselves amply remunerated for what they afford in what they mutually receive.

SMUT MACHINE.

The Editor of the American Farmer speaks in the highest terms of a machine, lately invented by a Mr. Barrett, for separating smut, garlic, dirt, &c. from wheat. If the machine is all that it is described to be, the inventor will obtain a suitable reward for his ingenuity in bringing it to this market. Our millers are proverbially enterprizing and liberal.

CARRION.

How few there are who fully appreciate the value of carrion; and, instead of making a suitable and profitable use of it, carry it out into their pastures, or perhaps leave it uncovered near their buildings, where it will pollute the air and raise an offensive stench, until the action of the atmosphere has destroyed its use, or the fowls of the air or some animal has eaten it up or carried it away.

Now a *wise* man, if he has a horse, a cow, a hog, or sheep to die, will not leave them to rot where the stench will be offensive or draw them off, and let them lie uncovered, where there is no prospect of their carcase enriching the ground: no—but he will dig about his fruit trees and there bury them. The body of any small animal will do more good placed at the roots of an apple tree than they were worth when alive, as will be seen by the growth of the tree so favored, when the body of the animal has become putrified.

Those who have been in the habit of wasting carrion may not believe this statement; but I can assure them that they will find it true; and

if they will but once try the experiment, they will be *convinced* of the fact at once. Let the unbelieving try it.—*New England Farmer.*

SOILING CATTLE.

By soiling is meant feeding cattle in their stalls or yards, with green grass cut for the purpose, instead of suffering them to feed at large in the grass field. We find in the Nashville Agriculturist a very interesting article on this subject, extracted from an English agricultural paper. The writer asserts, and, we think, proves, that three cows may be provided with food in the house all the year from the same quantity of ground which will scarcely feed one under pasture for the summer; that one cow so fed in the house will give as much as three fed in the field; and that each cow fed in this way will produce as much manure as three fed in the ordinary way! We speak from some little experience of our own, when we affirm that soil-feeding possesses all the advantages claimed for it, especially on small farms. One hand, in two hours every evening, can cut and haul grass enough, from a convenient field, to feed twenty or twenty-five head of cattle a day. Suppose it requires three hours daily labor, and then calculate the gain. On land much requiring manure, the additional manure saved would more than pay for this labor. Then there is the great advantage of making a small farm equal to one double the size, conducted on the other plan; or the advantage of being able to dispose of half one's large farm, and make as much as before, on what remains. Think of it, and decide how far the situation and nature of your farm may permit you to adopt the soiling plan.—*Louisville Journal.*

NEW WAY TO MAKE FRUIT TREES.

Two of the best farmers in the range of our knowledge, one a resident of Coos county, and the other in Orange county, Vermont, have communicated to us the manner in which they secure their fruit. It is this: they dig at some distance from the body of a favorite tree, until they find a root, which they cut off. The part disjointed from the tree is turned up so as to appear above the ground. It sends forth shoots the first season, and bears, in a few years, fruit precisely like that upon the parent. Let those whose trees are decaying, or who wish to increase good varieties, try the experiment.

N. H. Whig.

SHUCKS.

Mr. J. A. Grimes, of Horrodsburgh, Kentucky, gives the following as his method of feeding milch cows:

"We procure in the fall, all the corn-shucks we can, as the farmers put little value upon them. When we commence feeding, we have a large kettle in which we can heat water, and a basket holding the quantity we intend for each animal. We then take the shucks to a common cutting box, and cut them as you would hay or oats, and scald them a few minutes in the kettle. Then take them out and sprinkle three quarts of meal to the bushel of cut shucks, and you will have a better feed than three gallons of corn or meal, fix it as you will. When I was last in Mississippi, the corn crop was very short, and I suggested this way of feeding to some of my friends, for feeding mules and horses as well as milch cows, and before I left, was told the cows had improved very much in the quality as well as the quantity of their milk."

American Farmer.

We can, from our own experience, fully sustain the assertions of Mr. Grimes.

ELDER.

We have seen it stated somewhere, that elder branches, intermixed in their layers between bundles of oats, &c. will prevent rats from destroying the grain. Will any body vouch for it?

WHEAT.

The Germantown Telegraph, which has much credit for its agricultural articles, speaking of the crop of Mr. Lukens, of Pennsylvania, says:

"From the appearance of the straw, we should judge that the crop had been cut at a *proper* time—we mean *early*—earlier by a week than most farmers are in the habit of entering their grain fields. Indeed, we have long been of the opinion that the generality of farmers almost always cut their grain *too late*, and subject themselves, in consequence, to heavy losses, from the injury, and in some cases, the destruction of their crops, by mildew and rust; for it is a fact, susceptible of the clearest proof, that nearly all the harm received by the wheat and rye, from these causes, is effected *after* the crop has *sufficiently* matured for cutting.

"Farmers should not be afraid of cutting too early. We have repeatedly known grain to be cut while in its milky state, and to produce as heavy and handsome a berry as a miller would wish to grind, with not a speck on the straw to mar its golden hue. While on the very next farm, where they were 'not going to be such fools as to cut grain before it was ripe,' and delayed harvesting it a week or ten days longer, nearly the entire crop was destroyed by rust. Let the experiment be tried, at least in a small way, by our agricultural friends, when each one

can judge for himself; and let the result be communicated to us, that the farming interest generally may *reap* the advantage of it, whatever it may be."

TOBACCO.

A writer in the Farmers' Register maintains, that tobacco is not more exhausting in its nature than any other great staple, extensively cultivated. He esteems it the most profitable, indeed the only reliable, crop for Eastern Virginia, especially that portion of it, which would be contained between two lines from the Atlantic to the Mississippi, passing through the towns of Raleigh and Fredericksburg. This, he says, has been designated, par excellence, the tobacco country. The cheapest mode of making tobacco, he says, is the one pursued by Mr. Old, of Powhatan. He keeps two lots, which are alternately cultivated in oats and tobacco. The oats rolled down, when *perfectly ripe*, and, if convenient, ploughed in. If the lots are rich when the system is commenced, they will yield, every other year, at least one thousand pounds to the acre, and continued to improve.

The author is evidently a sensible and pleasant writer, and one very highly spoken of by the Editor of the Register.

To the Editor of the Southern Planter:

My Dear Sir,—I am much pleased with an article that appeared in one of your early numbers, on the subject of a post and rail fence, and have determined to try it. I am in want of a morticing axe, such as you describe, and will avail myself of your offered services to procure one. I have already gotten together a large quantity of posts, for winter work, and hope to show you a pretty line of post and rail fence when you visit me next spring.

Yours, * * * *.

The above is an extract from a private letter, but as we have had several applications for the morticing axe, some of which may appear to have been neglected, we will avail ourselves of this opportunity, to say, that we ordered a lot from Mr. John Hitchcock, some time ago, to meet the wishes of our friends. The necessary delay attendant on an extensive establishment for the manufactory of edge tools, which he is erecting in this city, has prevented their completion. We have, however, every assurance that they will be ready, now, in a few days, when we shall be happy to supply all those who are desirous to make preparations for this excellent plan of fencing. The description alluded to may be found at page 20, vol. 1 of the Planter.

VINEGAR.

In the Detroit Farmer, Mr. Holt gives the following statement of a mode of obtaining vinegar from the sugar beet:

"The last season I grated about a bushel of the sugar beet to a fine pulp, and pressed the juice therefrom, of which I obtained six gallons. I put the same in a vinegar barrel, which was entirely empty, and in less than two weeks I had as good and as pleasant vinegar as I ever obtained from cider, and was equally as strong and clear. I see no reason why our farmers cannot have good vinegar as abundantly as if they had a plenty of apples for making cider."

LIME.

An ingenious writer in the American Farmer has ventured the suggestion, that the beneficial action of lime and plaster of paris is to be attributed to the acid, rather than to the bases, of these substances, and infers, that a series of experiments should be made with different acids. He states that gardeners, in the neighborhood of London, are in the habit of watering their cucumbers with a weak dilution of sulphuric acid. He also attributes a peculiarly green and healthy appearance he once observed in a portion of a corn crop, to the fact, that that portion of the seed had been steeped in a solution of sulphate of iron, to prevent the depredations of the crows.

As the writer himself suggests, the theory needs observation and farther facts to confirm it.

HESSIAN FLY.

From Silliman's Journal, a work of unrivalled reputation, we extract the following, the conclusion of a minute examination into the history and nature of the Hessian fly:

"A few suggestions may be made respecting the best modes of preventing the ravages of the Hessian fly. They have all been published before, by others, but they are of such a nature that there is little probability that any of them will ever exterminate the insect. The stouter varieties of wheat ought always be chosen, and the land should be kept in good condition. If fall wheat is sown late, some of the eggs will be avoided, but risk of winter killing the plants will be incurred. If cattle are permitted to graze

the wheat fields during the fall, they will devour many of the eggs. A large number of the pupæ may be destroyed by burning the wheat stubble immediately after harvest, and then ploughing and harrowing the land. This method will undoubtedly do much good. As the Hessian fly also lays its eggs, to some extent, on rye and barley, these crops should be treated in a similar manner."

SUCKERS.

The following is an extract from a letter received from Mr. D. P. Curtis, of Warwick county, Virginia:

"I perceive that farmers differ much as regards the propriety of suckering corn. My own experience teaches me that suckers, which spring from below the first joint of the mother stalk, will put forth surface roots and produce as good corn as the stalk itself. Provided the season is favorable, and the corn too thinly planted, this may prove an advantage. But it seems to me, that a good farmer would plant his corn as thick as his land would bear, and keep off the suckers."

TRANSPLANTING.

We are pleased to find from inquiries addressed to us, that our suggestions about the advantages of a good orchard have not been unavailing, and as this is the proper season for transplanting, we will take the liberty of warning our friends against the common error of setting trees too deep. They should never be set deeper than they were before removal. In that case, the upper roots will be very near the surface. A stake, rather than extra depth, should be relied on to stay them. Dig a hole four feet square and two feet deep—fill it up, to within five or six inches of the top, with rich mould, taking care to cover the bottom of the hole with two or three layers of small stones. This will serve to draw off the superfluous moisture, and wonderfully improve the growth of your trees, as well as the quality of your fruit. Be careful not to bruise the tender roots, but let them assume the position nature assigned them, and you will not lose one tree in a thousand.

FATTENING.

We copy the following excellent rules for fattening animals from the Albany Cultivator. We would only add to them the requisition of comfortable quarters, good straw beds, and cleanliness, with occasional irritations of the skin. Close attention to these directions will ensure success.

"1st. *The Preparation of Food.*—This should be so prepared that its nutritive properties may be all made available to the use of the animal, and not only so, but appropriated with the least possible expenditure of muscular energy. The ox that is obliged to wander over an acre to get the food he should find on two or three square rods—the horse that is two or three hours eating the coarse food he would swallow in fifteen minutes if the grain was ground, or the hay cut as it should be—the sheep that spends hours in making its way into a turnip, when if it was sliced it would eat it in as many minutes—the pig that eats raw potatoes, or whole corn, when either cooked, could be eaten in one quarter of the time now used, may indeed fatten, but much less rapidly than if their food was given them in a proper manner. All food should be given to a fattening animal in such a state, that as little time and labor as possible, on the part of the animal, shall be required in eating.

"2d. *The food should be in abundance.*—From the time the fattening process commences, until the animal is slaughtered, he should never be without food. Health and appetite are best promoted by change of food rather than by limiting the quantity. The animal that is stuffed and starved by turns, may have streaked meat, but it will be made too slowly for the pleasure or profit of the good farmer.

"3d. *The food should be given regularly.*—This is one of the most essential points in feeding animals. If given irregularly, the animal indeed consumes his food, but he soon acquires a restless disposition, is disturbed at every appearance of his feeder, and is never in that quiet state so necessary to the taking on of fat. It is surprising how readily any animal acquires habits of regularity in feeding, and how soon the influence of this is felt in the improvement of his condition. When at the regular hour, the pig has had his pudding, or the sheep its turnips, they compose themselves to rest, with the consciousness that their digestion is not to be unseasonably disturbed, or their quiet broken by unwonted invitations to eat.

"4th. *The animal should not be needlessly intruded upon between the hours of feeding.*—All creatures fatten much faster in the dark than in the light, a fact only to be accounted for by their greater quiet. Some of those creatures that are the most irritable and impatient of restraint while feeding, such as turkeys and geese, are found to take on fat rapidly when confined in dark rooms, and only fed at stated hours by hand. There is no surer proof that a pig is doing well, than to see him eat his meal quickly and then retire to his bed, to sleep or cogitate until the hour of feeding returns. Animals while fattening should

never be alarmed, never rapidly driven, never be fed at unseasonable hours, and above all things, never be allowed to want for food."

WHEAT.

From the same paper we copy the following observations on the preparation of seeds:

PREPARATION OF SEED.

Next to having good seed, in our estimation, is the preparation of it previous to sowing. This should never be neglected. Washing it assists materially in freeing it from all foul seeds, destroying the ova of insects that may have been deposited upon it, and the alkaline solutions which should always be used, act a most important part in aiding the germination of the seed. Among the experiments which have been made to test the effects of various washes or steeps, the following from Young's Annals of Agriculture, and which have been frequently repeated and varied, but with similar effects, may be considered the best and most conclusive:

"December 7th, sowed fourteen beds with the same seed wheat, as black with smut as ever I saw any.

	Results condensed.	*Smutty ears.*
Bed No.	1, sown dry, nothing done to it, had	377
"	2, washed well in clean water, - -	325
"	3, " in lime water, - - -	43
"	4, " in a lye of wood ashes, -	31
"	5, " in arsenic and salt mixture,	28
"	6, steeped in lime water four hours, had	12
"	7, " in lye four hours, had -	3
"	8, " in arsenic four hours, had -	1
"	9, " in lime water twelve hours, had	6
"	10, " in lye twelve hours, had -	0
"	11, " in arsenic twelve hours, had	4
"	12, " in lime water 24 hours, had	0
"	13, " in lye twenty-four hours, had	0
"	14, " in arsenic twenty-four hours, had	5

M. Dombasle, the celebrated French agriculturist, prefers a wash made of Glauber salts, the seed to be soaked in this three or four hours and then dried in caustic lime. This would not be materially different from the practice now so common of washing or rather soaking the seed wheat in brine, and then drying it with quick lime, a practice we can unhesitatingly recommend to every wheat grower. Let the brine be strong enough to float all light or defective seeds, and after a thorough soaking, drain the seed slightly, pour it upon a floor, and dry it with newly slaked lime, as on the causticity of this, much of the benefit of liming is depending. We have tried drying brined wheat with gypsum instead of lime, but so far as the smut was concerned, it was a decided failure. That part of the field sown with the gypsumed seed was about the smuttiest wheat we ever saw, while that part which was limed was perfectly free and pure. In addition to the advantages of liming wheat for the prevention of smut, we are convinced that alkaline substances, such as lime, soda, wood lye, &c. perform an important part in aiding the germination of the seed, by converting the deposit of nourishment which nature has provided in the seed itself in the shape of starch, flour, gum, or mucilage, into a substance suitable for the food of the young plant, more quickly than would be done if not thus aided. Every person who has made the experiment with seeds prepared with lime, and those unprepared, must have been surprised at the difference in the time of their coming up, and the vigor of their growth. Thus beet or turnip seed soaked and part dried in lime, and the other sowed without, has been found to have the advantage altogether on the side of the limed part; and the same result will be had in the preparation of wheat.

M. Maltereu, in a series of experiments on the germination of seeds, found that they germinated much quicker in alkaline solutions than in acids; that they germinate sooner at the negative or alkaline pole of a galvanic battery, than at the positive or acid one; and as galvanic or electric agency is now known to exert a powerful influence over vegetation, it can scarce be doubted that the alkaline agency is exerted in this way in the chemical changes necessary to fit the starch, gum, &c. for the food of the young plant.

PINE SAW DUST.

A Mr. White, from Mississippi, inquires, in the Cultivator, with what benefit pine saw dust can be applied as manure. It may be, as the Editor suggests, that it can be used advantageously in stables to absorb the urine, but we are satisfied, from our own experience, as well as the testimony of others, that the saw dust of the southern pine will lie in the ground for years without an approach to decay. It is esteemed, hereabouts, rather injurious than otherwise, and we have known the manure from stables, where it was used for bedding, refused as a gift.

REMEDY FOR THE TURNIP FLY.

Mr. B. P. Johnson, in the Cultivator, says, that he has tried with great success the plan, recommended by Mr. Parsons, of soaking turnip seed for twenty-four or forty-eight hours in tanners oil, and then rolling them in plaster, to facilitate the sowing. It is an effectual preventive against the ravages of the fly, or flea, that is so much dreaded by the cultivator of turnips.

PRESERVATION OF TIMBER.

To the Editors of the Cultivator.

My name having been unexpectedly associated with the publication in your columns of

the discoveries of M. Boucherie, relative to the preservation of timber, by the infusion of various antiseptic fluids into the previous circulation of the tree, it seems proper that I should communicate a few explanatory facts.

There seems to be some doubt in the minds of many of the practicability of infusing liquid substances in the manner recommended. To such I respectfully suggest, if they happen to have a favorite ash or oak growing near their dwellings, to bore a few holes with an auger near the place where trees are usually cut with an axe—entirely into the heart of the tree—fill the hole with the preserving or coloring substances, plug up the holes carefully, and mark the progress of the fluid by means of the leaves. This is a very cheap and easy process, and is a practical remedy for those who apprehend any difficulty in placing large timbers in tanks and saturating them by external applications.

Under Kyan's patent, (obtained in England, throughout the most of Europe, and in this country,) corrosive sublimate has been used for preserving from the dry-rot, timber and textile fabrics. This salt combines with the fluids of the timber, and forms solid precipitates that are not capable of absorp ion from the atmosphere of either nitrogen, oxygen, or ammonia. Many cheap substitutes have been suggested, and as early as six years ago, Dr. Woollastan proposed sulphate of copper, or blue vitriol; and some trials were reported to the House of Commons. The whole evidence produced and submitted to that assembly is important; it seems to prove beyond dispute that Dr. W.'s discovery is more important than Kyan's, and was suggested by his acquaintance with the copper mines, where he had noticed that wood subjected to the operation of the cupreous waters had been preserved many years, while those in the iron and lead mines soon decayed. He has since made numerous trials with various salts, and has uniformly found that sulphate of copper is the best preservative. Since his experiments have been successful, Mr. Margery has taken out a patent for the exclusive right of using sulphate of copper for this purpose, and it has excited much interest in the English journals. A patent, I understand, has been refused in this country, either on account of the individual not being a citizen, or of his not being the inventor.

In the Boston Daily advertiser, of a few weeks back, you may find a copy of Margery's specification. I have not the paper by me, but the following is part of the specification: "To one pound of sulphate of copper add four gallons of water; let it be for about two days, frequently stirring it; then let it run upon the wood or other substance intended to be preserved, which should be allowed to remain in a tank, and be kept under the fluid two days more; it should be submitted in a perfectly dry state."

Respectfully, &c. CALEB CARMALT.

Friendsville, Susquehanna co., Pa.
7th month 26, 1841.

We have frequently noticed the colored waters of the upper part of the Chickahominy river. It evidently proceeds from some mineral, which we have heard suggested, with no great likelihood, to be copper. In this water, many trees and shrubs are growing. Can any of our Hanover friends inform us, whether the wood of this growth is tinged with the color of the water, or whether any peculiar quality has been imparted to it? The subject is very curious, and any information will be interesting.

We should as soon expect to find a good nutmeg made of wood, as the delicate flavor of our favorite herb extracted from an American weed. But nothing is too difficult for Yankee ingenuity. We find the following novel announcement in the Farmers' Visitor:

AMERICAN TEA.

Loudon, N. H., July, 1841.

To the Editor of the Farmers' Monthly Visitor.

As there are many inquiries respecting the gathering and drying our native American tea, I would observe that this tea has mostly been used for a medicine as a remedy for pleurisy, which has given it the name of ribweed: therefore the best method of drying it to make it palateable has been little studied. My method has been to strip the leaves from the stalk with the hand in the field as it stands—put them in tin pans and set them in a warm oven till wilted—then dry them on blankets in the shade. Great improvements may be made on this method, I have no doubt.

Habit has a strong hold on man: there are those who have taken this tea at first as medicine, and who prefer it to the tea imported from China after using it for a while. This plant may be found in almost every part of New England—it has all the exhilarating properties of foreign tea, and may be secured with little expense.

Respectfully yours,

SHADRACH CATE.

The Chinese had as well knock under at once. The lazy louts will find Yankee enterprize more difficult to contend against than British oppression.

ASSOCIATION.

The advantages resulting from association are universally admitted. Man is by nature grega-

rious. UNION is the guardian spirit of our institutions. Its strength has been exemplified by Æsop with a bundle of rods. All classes but the agricultural have felt the benefit of united action. It is true, they are more separated than other classes, and possess less facility of communication. But until that difficulty is overcome, until farmers erect themselves into a class, and pursue their profession as such, they will never bring their art to the perfection which it is capable of attaining. Individual and isolated action needs the stimulant of public exhibition. The gratification of an honest pride, the applause of friends, are nobler, and we believe stronger incentives than pecuniary interest. In England, where the landed interest is the great support of a wealthy aristocracy, the annual meetings of their agricultural associations are gotten up with great splendor, and with great effect. The time is a jubilee and a holiday, throughout the land. The farmers meet in thousands to witness the great exhibitions of agricultural improvements, and, probably, in a few days, he learns more from the wisdom of others, than his individual exertions have obtained for him during the year. It is true, that these meetings are gotten up and supported by the aristocracy, who are identified with agriculture. But we too have an aristocracy, much more numerous, and much more powerful than any that exists in Europe. We all belong to that class, and the interest of all is identified with agriculture. It is the primevial, natural, occupation of man, and its supremacy is absolutely necessary to the existence of free institutions. Let us, then, all unite in sustaining this great art, by which all others are sustained. Let us form associations and annual exhibitions; not poor, meagre shows, unworthy of attention, but let the powerful and wealthy landed proprietors, in every district, unite in getting up an annual exhibition, worthy of the name. The mechanics lately held a fair in the city of Boston, at which there was an attendance of seven thousand persons on the first day. Associations are springing up all around us. Let us not be behind our sister States. Every little paper in South Carolina is crowing over us, with its published list of seventeen agricultural societies. Give *us* a list of *twenty*, and we will publish it at the head of our paper.

We hear complaints from some sections of the country that the calling of the farmer is in disrepute. It is not so here. We are a great agricultural people. Manufactures and commerce are looked upon as subsidiary to the great art, which calls them into being. The cultivator of the earth is the lord of the land. The wealth, refinement, and information of the State are to be found in this class. Indeed it is the cynosure of all eyes. It is the haven of rest that all seek. Amidst the busy mart, in the toil and dust of the streets, the weary merchant, the exhausted artisan, lays the flattering unction to his soul, that he will, one day, be enabled to rank with the easy, stately, and dignified farmer he has just passed in his hasty walk. It behoves all such to lend their aid in perfecting the science to which they are looking for repose, and as the best means to effect it, to contribute their assistance to the support of agricultural societies.

FALL PLOUGHING.

The following article, from the Genesee Farmer, on the subject of fall ploughing, seems to us judicious and well timed. It coincides, too, with our previously formed opinions on the subject, which, we believe, are those also of a majority of farmers. And yet, we understand that some of our most practical men, and best informed farmers, are opposed to the system. Mr. William Wickham, we understand, condemns it, and Mr. E. Winston expressed to us his determination to abandon it. We should be much pleased to learn the objections of either of these gentlemen to a system that is so generally approved. It may be, that their land is of the porous character alluded to in the last paragraph; at any rate, we should be glad to be informed upon the subject.

The following are the reasons given in favor of fall ploughing:

"The 'Practical Farmer' says, the more scientific opinion is in favor of *fall* ploughing, because to the action of air and moisture, it adds that of *frost*, whose sceptic or dividing quality is second only to that of the plough itself. In clay soils the preparation should never be omitted; because on those the action of the frost is greater, and because one ploughing of *this* kind, may save two in the *spring*, when time is every thing.

"The Monthly Genesee Farmer, vol. 1, page 180, in an article on this subject, says:

"1st. It is one of the established principles of philosophical agriculture, that the soil derives much of its productive property from the air, and that chemical changes and combinations are constantly going on, by which fertility is much

increased. These alterative effects of the atmosphere, and these changes of the qualities of the soil, are the more active and efficient as new surfaces are exposed to new action. For instance, much greater quantities of carbonic gas will be absorbed by a given surface of earth, if the earth is frequently stirred, than if it was allowed to remain with a single saturated surface. Ploughing, by exposing new surfaces to the action of the atmosphere must be productive of essential benefit; and as fall ploughing generally takes place after crops which have partially exhausted the surface of some of its nutritive and absorbent qualities, its service in aid of spring crops is greatly enhanced.

"2d. There is always on land more or less grass, weeds, stubble, or other vegetable matters convertible into mould by fermentation and decomposition, a process which is greatly aided by being turned under the surface of the earth. Fall ploughing renders such substances much sooner available in advancing the growth of crops, than they would be if left uncovered during the winter, independent of the great loss necessarily sustained by the washing away of the lighter materials and their dispersion by the winds.

"3d. Nothing acts more efficiently on moist soils in promoting vegetation, than high pulverization; and fall ploughing aids this operation most essentially. Lands that if ploughed in the spring only, will remain in large cakes or lumps, defying the efforts of the farmer to reduce them suitably, will, if ploughed in the fall, be found loosened in texture and fitted for early operations in the spring of the year. Frost is the most efficient disintegrator of the soil with which the agriculturist is acquainted, and he should avail himself of its valuable labors in all practicable cases.

"4th. The earlier the ground can be prepared for the suitable reception of spring crops, such as corn, spring wheat and barley, the better it will be found for the cultivator; and in nine cases out of ten, early sown crops are the heaviest and most productive.

"5th. Ploughing land acts more effectually in destroying insects than any other mode of treatment, and fall ploughing for this purpose is preferable to any other. Those insects which produce the most mischief to the farmer, such as the fly, cut worm, grub, &c. cannot resist the frost of our winters, if prematurely exposed to its action by a fall ploughing. The cut worm which accumulates in such numbers in old meadows and pastures, is thus destroyed, and crops planted on them saved.

"Lastly. Our summers are so limited in duration, that unless the time allotted to vegetation is fully occupied by the growth and ripening of plants, the certain failure of crops may be anticipated. Hence the farmer usually is more hurried by his work in the spring than he ought to be, in order to avoid having his crops caught by the frost and snow. It should be the object of the farmer to have his necessary labor as nearly equalized through the season as possible, and thus avoid all pressures at inconvenient seasons of the year. Experience shows that the farmer in most cases, has more leisure hours in the fall of the year than at any other time, and he who would work it right, should employ this time in advancing his next spring's work, for such fall ploughing emphatically is, and thus preventing the pressure of business then usually felt.

"On soils very porous, those composed of gravel or sand, in which, for the want of a retentive sub-stratum manures are apt to sink, and their good effects to be lost; or on lands liable to be washed, as side hills, where the finer particles of the soil are in danger of being carried off by every rain, or the melting of the snow, fall ploughing may not be admissible, but on most others we are confident its adoption will be attended with beneficial effects."

To the Editor of the Southern Planter:

Sir,—In looking over the September number of your very useful and valuable paper, I was struck with the article by W. W. on manuring, in which he advances the very singular doctrine that "the mere covering of the land makes it wonderfully productive," and asserts "that a galled spot on which a few planks are laid will become extremely fertile." Now, sir, I agree with him in thinking that a heavy top dressing of straw is better for the land than the usual quantity of manure ploughed in, so soon as it is hauled out. But I account for it in a totally different manner. I do not think that the *mere* covering has much, if any thing to do with the increased improvement which that mode of using it effects; but that it is brought about by the straw remaining on the land during the whole spring and summer, and of course each rain carrying fresh nutriment from it to the roots of the clover or other grass, which very much increases its growth, thereby affording a much larger quantity of vegetable matter for turning in on the fallow fields. But if he will pass, the straw, which he now places unrotted on his land, through his stable yard, and have it there well decomposed, before he hauls it out, he will find it at least one-third more efficient, provided, he will use it in the way which he now uses his straw, that is, if he will top dress the fall before he fallows for wheat. In one way, and in one way alone, do I conceive the covering of the land to be valuable, and that is as a protection to the roots of the clover from the winter's frosts, giving an earlier start than it would otherwise have, which is of course desirable.

As for the planks, if W. W. were to use them

extensively, he would find it rather an expensive mode of improving his land, and if he can *ever*, or by *any* process make his "galled spots extremely fertile," he entirely beats all of my farming acquaintances, the most of whom have long since given up every hope of succeeding in the cure of any of their *regular galls*.

Sept. 27, 1841. A HANOVERIAN.

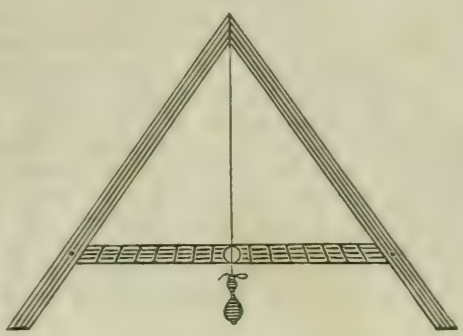
We were aware that the plan of our esteemed correspondent, "W. W." would meet with much opposition, on account of its variation from the established mode. We are glad to see that it has excited interest, and hope the subject will be thoroughly discussed. If any of our subscribers can bring their evidence to the support of W. W. we shall be glad to get it. "A Hanoverian" has friends enough—his is the established mode, and so far has the merit of common consent. We have shown the communication of "A Hanoverian" to "W. W." and he says, that he has no theory to advance, he only repeats the fact, that having tried both modes, he finds his farm much more productive under the system he advocates, than the trampling method, generally used. We can assure our readers that "W. W." is not a man likely to make a mistake about his own interest; he can calculate dollars and cents as closely as any man, and we hardly know one upon whose judgment we would sooner rely.

We are sorry to hear "A Hanoverian" say that his friends know no method of making galled spots productive. There are a good many "galled spots" in old Hanover, that we hope one day to see covered with verdure. One of the most productive spots we ever saw had been a gall, reclaimed by a cover of old leather, and other animal matter. There are many ways certainly of reclaiming galls, dependant upon the cause from which they proceed. Generally, they arise from the washing away of the upper surface or mould, leaving exposed an impervious and unproductive clay sub-soil. Here an admixture of sand, lime, and vegetable matter may be necessary. We should be in a bad way, indeed, if galls could not be made fertile. As to the theory of "covering" we do not know much about it, but have been under the impressiom, that any thing, even a *plank*, which covered the ground, made it productive. If we err in this, we shall be glad to be corrected.

TO OBTAIN WATER.

In our August number appeared a notice of an article in the Albany Cultivator, upon the subject of obtaining water in dry situations, by artificial means. We expressed ourselves a little sceptical at the time; our suspicions of its being an entire humbug have been confirmed by numerous reports from correspondents, who are unanimous in stating that they have tried it on a variety of soils, invariably without success.

LEVEL.



To the Editor of the Southern Planter:

My Dear Sir,—I have lately become a subscriber to your agricultural periodical, and rejoice much to find that we are gradually extending the list of home productions. We have now, I think, no occasion to cross the Potomac for an agricultural paper. But I well know that empty compliments will not pay the expenses of printing. I am, therefore, employed in obtaining for you a list of subscribers, which I will send you as soon as it is complete. Such exertions are necessary in the infancy of every paper, and I hope every friend to the cause of agriculture in Virginia will stir himself in your behalf. We can and will sustain a cheap periodical in the Old Dominion, provided, it is of the right character, and if you, sir, will continue to bestow upon your work the same labor that marks its pages to this period, you need be under no apprehensions for want of a liberal support.

But the main object of my taking pen in hand was to express my approbation of your efforts to introduce into Virginia that most valuable system of under draining. A little experience on the subject has convinced me that it is entitled to all the encomiums bestowed upon it. It is absolutely necessary to relieve lands from superfluous moisture to make them productive. Most of our lands are underlaid with a retentive subsoil, and are of the very kind to be most benefitted by this system. Of open draining I have done a great deal, and assure you I have found

my account in it. I am certain that thorough draining will often quadruple the product, and, indeed, it is calculated to render some lands, now productive only of noxious weeds, the most fertile in the country.

It has been found by experience, that, to carry off the water, a fall of at least three inches in every fifteen feet is necessary, and as it is useless labor to make it more than is required, this is the proportion I have adopted in my draining operations. To guide me in effecting this object, I use the common span level, figured at the top of this article. But in my mode of using it, I lay claim to a little originality. The feet are exactly fifteen feet apart, and one of them three inches shorter than the other. The instrument is now placed upon a perfect level, and the place where the bob line falls on the cross piece is marked plainly. This is, of course, out of the centre, one leg being shorter than the other. My instrument is now completed. I have only to set the shortest leg in the direction in which I want the water to run, and lower it, until, the line falls on the mark, and I have, of course, a fall of thee inches in fifteen feet. I now move the long foot of the level to where the short one stood before, and again make the bob play in place. Of course, the fall is continued.

This will be found to be a very simple and efficient instrument, and may be placed in the hands of a man of the plainest understanding. In making water furrows, it is frequently a most valuable auxiliary. These directions, simple as they are, are not useless, for there are many overseers, aye, and proprietors too, who are ignorant of the use of a span level. If I shall enlighten a single cultivator of the soil, I hope you will esteem this worth the place it will occupy. A Drainer.

STUMPS—TO REMOVE.

We published an article, some time since, in reply to enquiries for a stump extractor. In addaddition thereto, we copy the following plan from the Western Farmer. It possesses the great recommendations of cheapness and simplicity.

"Procure a dry red-elm lever, about twenty feet long, and about six to eight inches in diameter—a good stout log chain, with two yokes of oxen; this is all the *machinery* that is necessary. The mode of operation is thus: wrap the log chain around the stump a little above the ground, and make what is called a log-hitch; lay the lever horizontally on the ground, the large end next to the chain and against the stump; make the other end of the chain fast to this end of the lever, drawing the lever tight against the stump; the cattle are hitched to the small end of the lever, and driven around the stump in a circle of which the lever is the radius. One revolution of the oxen round the stump will generally twist out the largest of them; but should not the power thus applied be sufficient to move the stump, the side roots may be uncovered and cut partly off; after this is done, the stump will be easily removed. You will find this plan much preferable to any "patent stump extractor," that you may have seen puffed in the papers."

EGGS—TO PRESERVE.

A patent has been obtained in England for the following method of preserving eggs, which, it is asserted, will keep them sound and fresh for several years.

One bushel of quick lime, 32 oz. salts, 8 oz. cream of tartar. Mix the same with as much water as will reduce the composition to a consistency that will swim an egg. Put in your eggs and keep the top covered.

HESSIAN FLY.

A Mr. Oglesby of Pennsylvania asserts that he has discovered an infallible preventive of the ravages of the Hessian fly, as we learn from the following paragraph in the Harrisonburg Telegraph.

"Passing the farm of Mr. Oglesby the other day, our attention was called to a field of wheat of extraordinary promise, on which we were informed he had applied his preventive of the Hessian Fly. At a short distance from it on ground equally good, we were shown a field, where the remedy had not been applied, that was greatly injured by the fly. It would not, we thought, produce one-third part of the other field per acre. In the former field the fly has not been seen since the wheat came up, while in the latter it was visible in the fall, winter and spring. These have been the test fields for the season, and they still more conclusively satisfy Mr. Oglesby that he has made the important discovery that must result in an incalculable benefit to the country. He has proposed to Congress that a committee be appointed to test the remedy, and if they find that it is an infallible one, of which he has no doubt, that they will allow him a proper compensation, and then publish the discovery to the world for the benefit of all.

"What is important in the matter, is, that the remedy is within the reach of every one. Mr. O. informed us that it does not cost him more than ten cents per acre."

Such is the fancy of the farmers in this country to be represented by the legal profession,

that we doubt whether Mr. Oglesby can find a committee in Congress who can tell a Hessian fly from a cock-sparrow. At any rate we would advise the committee to look sharp, for many, as wise as Congressmen, have been fooled with remedies for the Hessian fly. If Mr. Oglesby has really made the discovery, and will declare it to the world, he is entitled to all the honors and emoluments due to a benefactor of the human race.

SOILS.

We have lately met with an excellent extract from "MORTON ON SOILS," the purport of which is, that the proper qualities of soils are deducible from a correct understanding of the office they perform. The soil itself affords no nourishment—it serves only as a great spring to receive and give up water, air, light, heat and decomposed vegetable and animal matter, the great elements of plants. There are three great earths the due admixture of which goes to make up a productive soil. Silex or sand, alumina or clay, and lime. Organic matter, whether vegetable or animal, should be kept in an active state of decomposition, because it is only the substances which are evolved in the process that afford food for plants.

It is the property of silex or sand, to decompose the manure bestowed upon it. So far it is useful; but unless tempered with a due admixture of clay, the porousness causes evaporation and waste.

A dry, light, sandy soil, on a clay subsoil, is more productive than on a sandy, gravelly subsoil, which permits the sinking of the valuable qualities of the manure. The clay underneath also affords a ready opportunity, by deep ploughing, of tempering the sand.

A tenacious, compact *clay* is even less productive than a soil composed of sand. In such a soil decomposition goes on very slowly, whilst in sand and gravel, the process is very rapid. Adhesive clay is also impervious to water, which is collected and retained in too great quantities for the purposes of vegetation.

Calcareous matter forming a soil is, generally, a carbonate of lime. It attracts moisture, and chemically combines with it. When burnt lime is slacked, whether by exposure or other process, it takes up one-fourth of its weight of water, and is as dry and powdery as the finest flour. When it is exposed to the atmosphere in this state, it soon absorbs the carbon, which was expelled from it by burning, and becomes of the same nature as it was before it was burned, namely, a carbonate of lime, but only finely divided. In its caustic state, that is before it has attracted the carbon, it is a powerful decomposer of animal and vegetable matter; afterwards, it has a tendency to preserve these substances from decay.

The decomposition of organic matter, be it remembered, forms the chief food of plants. The free ingress and egress of light, air, heat and moisture, are necessary to this process. We see then the necessity of frequently opening and moving the earth. We also see the necessity of a due admixture of the primitive earths—the SAND to promote decomposition, and correct the tenacity of the clay—the CLAY to prevent too hasty evaporation and loss, and the CARBONATE OF LIME to attract moisture. We see also the value of a clay subsoil, and the necessity, so frequently urged, of subsoil ploughing.

What should be the proportion of the different constituents of a productive soil, have been variously stated by different authors, and will, of course, depend much upon the moisture or dryness of the climate: according as it is moist, the soil should be friable and porous, as it is dry, it should be adhesive and retentive. Under these circumstances the proportions may vary from 50 to 70 per cent. of silicious matter; from 20 to 40 of clay, or aluminous matter, and from 10 to 20 of calcareous matter. The decomposable vegetable or animal matter should not exceed one-fourth of the weight of the earthy constituents.

We desire to draw attention too, to the opposite effects of caustic and carbonate lime, a point too little regarded in experiments made with this article. It is not an uncommon practice to spread lime on the manure heap, with very different results as reported. Now, if the lime is used before exposure, it hastens the decomposition of the organic matter, and although some of the gases evolved may be retained by the lime, the probability is, the greater part are lost. The carbonate, on the other hand, prevents the natural decay, and preserves these qualities for the growth to which they are to be applied. But if administered in too great quantities, it will retard decomposition beyond the period when it is desirable that it should take place. Lime is like an edged tool, which although invaluable in the hands of a skilful operator, may prove very injurious when wielded by an unpractised hand.

AMERICAN AGRICULTURE.

The inquiry has often suggested itself to us, whether if capital and enterprise were thrown into agriculture in the same way as manufactures and commerce, it might not quite as often prove to be profitable, and lead to great improvements in this art which lies at the foundation of all others. It is quite evident that in this country, agriculture often fails for want of capital. In every other employment, capital is lavished with a liberal hand; but it is stinted out to this

in meagre pittances, and there is comparatively but little interest taken in improvements which tend to abridge labor, and in the acquisition of knowledge in regard to the art of cultivation. Even results are often not attended to at all, and while every thrifty mechanic, manufacturer and merchant, knows precisely the amount of his outlay, and income, and the exact cost of production, very few farmers pay a careful attention to these statistics.

In England capital is devoted as liberally to agriculture, as it is to commerce and manufactures, and is even a more favorite investment with the nicely calculating capitalist than either of these last.

Another thing in which our agriculture fails, we apprehend, is a disregard of the proper division of labor. To entire success in any occupation it is necessary that the whole power of mind should be thrown into it. The mechanic who should undertake to learn many different trades, and to make his own shoes, hats, clothing, household furniture, &c. would surely fail of success; and the different branches of agriculture, are separated by quite as distinct and broad a line as the various mechanic arts. There is not a single vegetable, useful to man or beast, the careful cultivation and preservation of which is not sufficient to employ the whole study and attention of a lifetime, and in relation to which a man may not every year be learning something new by close observation and experiment.

Our opinion, founded on theory and observation, is that with a greater division of labor, farmers would make much more money. We do not suppose they will agree to this; many objections will be brought against it, which we have not time now to notice; but there is no doubt that the time will come, when the belief, now so common, that a farmer must raise a little of every thing, will be numbered with old and exploded errors. Sufficient confirmation of this is found in the simple fact, those farmers who concentrate their attention upon a few articles, now almost without exception succeed the best. To carry out this system, a different division of farming lands, to some extent will be required; those engaged in careful tillage, will require, comparatively, but a few acres, while those engaged in the raising of stock, &c. may need their hundreds and thousands.

The above is taken from the "Newburyport Herald" and is worthy of deep consideration.

It is undoubtedly true, that many of the arts owe their high degree of perfection to the division of labor, by which, the whole intellect is concentrated on a small part. Nothing is more conducive to the attainment of excellence as well as economy of production. How far the principle is applicable to the peculiar art of agriculture, is the question. If one man could employ his capital in the constant production of one crop, and obtain, with facility, the articles he did not produce, it would, most manifestly, be to his interest to confine himself to the single production; but the art of cultivation, unlike any other, is dependant upon the season. When a crop is planted, the action of nature must be awaited. She is the handmaid, whom it is the farmer's business to keep constantly employed. Her contract is to mature one crop at a certain period, and another at a different one; and the stubborn jade will not be driven from her resolution, even to afford an opportunity of exemplifying the great principle of the Editor of the "Newburyport Herald." Most happy would it be for the art of agriculture, if it were otherwise—if, like other arts, it could be subjected to the complete dominion of man, to be, like them, subdivided and allotted out in special departments. None, but those who are familiar with mechanical operations, are aware of the vast effect produced by a minute subdivision of labor. It often leads to a reduction of nine-tenths of the cost of an article. It is by this process, that a paper of pins is produced, at a cost, that would hardly cover the price of a single pin, if wholly manufactured by one individual. To the fact that advantage cannot be taken of this principle, to its fullest extent, in agriculture, we chiefly ascribe the retarded progress of this noble science. But, although, we cannot here avail ourselves of the skill and facility that are acquired by even the commonest mind in the constant repetition of the same simple operation, we may carry it to a much greater extent than is commonly practised. Whenever an operation is to be repeated, the farmer should be careful to employ those hands, who may be supposed to have acquired some skill by a former process. As far as practicable, his drivers, ploughmen, wood cutters, &c. &c. should be well taught, and kept each at his specific business. Every hand should know precisely the duty of the day, which should be, as near as possible, that of the day before. Great loss of time is occasioned by a change from one occupation to another. The mind, as well as the body, has to be turned into a new channel—another set of tools has to be looked up, and it frequently requires a new hand longer to *get ready*, than to do a job.

Morever, we think that a farmer should confine himself to as few productions as the nature

of things will permit. The general opinion, we know, is, that he should raise all that he needs for consumption. There are certainly many additions to his main crops that may be made with labor that would otherwise be idle, and all such it is, of course, the farmer's policy to produce. There are also some necessaries that it is cheaper to raise for himself, because of the inconvenience and expense of procuring from market, but, although the arbitrary arrangements of nature prevent his concentrating all his energies on one crop, still, he should consider the diffusion of his powers a necessary evil, and should carefully guard against its extension further than is necessary. There is much wisdom in the old saying, "A Jack-of-all-trades is good at none."

To the Editor of the Southern Planter:

Dear Sir,—I come now to the profit of the hog. Aye? the profit, the profit? "that's the rub." And if I can succeed in convincing my brother farmers, that the hog is indeed a profitable animal to raise, I doubt not that in these pinching times, hogs will soon become "thick as blackberries."

But before entering formally on this subject, we must settle a few preliminaries. And here I would state in general, that I pretend not even to conjecture, much less to know the *ultimate* effect, which the great and rapid multiplication of hogs would have upon the market. Its *immediate* effect, I doubt not would be, just what I aim at in these essays—to arrest the present immense importation of pork from the west, and the immense drain of our money from the east, which is rapidly reducing us to poverty. So that, to avoid starving, many of us are compelled to sell out our patrimony, and go to the west, where meat is cheap. Their present profits will not enable them to buy meat, at a high rate, and remain where they are.

What, therefore, I undertake to prove is that as matters now stand, it would be *cheaper* for *all* farmers in ordinary circumstances, to *raise* their own meat, than to *buy* it. And in regard to a large portion of them, it would be to their interest to raise a considerable surplus for market. The proposition being thus stated, I proceed to settle the preliminaries alluded to above. The first is the usual price of corn, and the second is, the common price of pork. If it appear upon inquiry, that the man pays more for his pork, than he can get for the corn necessary to raise it, the matter is at once settled, for it will then be evident, that in buying the former and selling the latter, he is doing a losing business. I am fully aware that the price of these two articles, is subject to considerable fluctuations. But I presume it will be conceded, that sixty cents the bushel or three dollars the barrel for corn; and six dollars the one hundred pounds for pork, is about their fair average price. Last year corn was cheaper and pork higher. The probability is, that this year, corn will be dearer and pork cheaper. It will also be conceded by all practical farmers, that a hundred ears of corn of the common size, will make a bushel. Now I do affirm, and that not upon theory but upon the trial actually made hundreds of times over, so that now it is reduced to a regular rule—that two ears of corn a day, with other auxiliary food, is not only sufficient, but a liberal allowance for a hog for the first six months of his life; and that four ears is a plentiful supply for the next six months; so that three ears will be the average for the year. Beyond this age, I do not think it advisable to keep the hog. Indeed I generally dispose of him at from six to nine months old. Now, as the year consists of 365 days, three times that number, or 1,095 or say 1,100 is the number of ears that a hog will eat in a year.

The next inquiry is—to what weight can you raise the hog in that time? And here for an answer, I will not go to Doctor Martin with his Woburns, or to the Editor of the Kentucky Farmer with his Berkshires, but I will go to my own hog pen, where (till lately) I had none but the common hog of the country; and I do affirm, that with the above amount of corn, and no clover lot to run in, my hogs did, not in one instance only, but in many instances, reach 200 lbs. But as I intend not to be extravagant in any case, but to limit my calculations to the concessions of every practical farmer, I will put down the weight at 150 lbs. These preliminaries being settled, the arithmetic will stand thus. For 1,095 ears of corn, or say eleven bushels, you get a hog weighing 150 lbs. which at the price settled above is worth $9. Eleven bushels of corn at 60 cents, amounts to $6 60—that is, for corn which in market (leaving out of view the expense of carriage, commissions, &c.) would bring $6 60, you have a hog worth $9. The difference of $2 40 is the profit on each hog. And upon a hundred hogs, the profit, at the same rate, would be $240—a sum not to be despised these hard times.

Now, let it be borne in mind, that throughout the whole of the above calculations, I have assumed nothing, stated nothing, that can be construed as even *bordering* on the extravagant. I have taken the common hog of the country for my subject, nor have I stretched him a whit beyound his proper dimensions. So far from it I have actually gone below what a moderate and accurate estimate would warrant, and yet the result is a handsome profit.

But suppose, instead of our "land pikes and alligators," we take Dr. Martin's Woburns, or

the Kentucky Farmer's Berkshires, what would be the result? The Doctor made some of his pigs gain 4 lbs. or more a day, whilst the Farmer's (as I suppose would be the case with most farmers) fall considerably below. Some one, I see has recently beat the Doctor with a half Berkshire. But all these I consider as extraordinary cases. I am content at present with the very moderate calculations made above.

But were I to stop here, I do not feel that I should do the justice to my proposition to which it is entitled. It is a fact that we have what every body admits, is an improved breed of hogs among us. And it is also a fact, that this breed is rapidly supplanting the common hog every where. So eager are the farmers to obtain the Berkshire, that they suffer themselves, in many instances, to be imposed on by a spurious article from the north. This is always to be suspected, where the price is even *one cent* below twenty dollars the pair. If you must get your pigs from the north, the best plan is to send on your agent and let him make judicious selections. Nor do I say this because I am a breeder. All my pigs have thus far been engaged as fast as they made their appearance, and many of them long before.

We will suppose, then, and as the man said, I really think it a "very reasonable supposition to suppose"—that instead of the "land pikes and alligators" constituting, as they now do, the common hog of the country, the graceful and thrifty Berkshire will have this honor, then may we not, in all moderation, estimate the weight of our hog at from 200 to 300 lbs. at a year old? We will fix on the lowest number as a safe estimate. And how do matters stand now on the score of profit? We here have a hog worth $12, and we have got him for corn which in market would bring us only $6 60. On this hog, then, we have a clear profit of $5 40, and on a hundred such hogs, the profit would be $540.

But you will inquire, do you allow nothing for the extra food of which you have spoken more than once?—for the time and trouble in taking care of them? To this I reply that for all these, I make the most ample allowance. But before I tell what it is, I beg leave here to define what I call extra food. And that I may state the matter in as luminous a form as possible, I will mention the different kinds which I consider most valuable, and also the different periods of the year when they ought to be used. I will begin then with the month of May, when (if I lived at a distance from a hay market) I would turn all my hogs on a clover lot, but as I can't afford this indulgence to my hogs, I come as near to it as possible in a more economical way—that is, I have cut and carried to them as much clover as they will eat. A small spot of clover with its first and second growth, will generally supply extra food from first of May till about the middle of July, at which time the cymlin crop (of which I am careful to have a pretty large one) begins to be fit for use. The cymlins, with beet or cabbage leaves, weeds, purslin, &c. last till first September, when I begin to gather pumpkins freely from the corn field, and these are now my dependance till the end of the year. During the remainder of the winter I depend on the sugar beet—and during spring, up to the first May, my dependance is on the ruta baga turnip. Now my compensation for clover, cymlins, pumpkins, beets, turnips, time, care and all, is the *manure* of my hog; so that for all extra food and attention, he pays me, and I think amply, in his manure, and for his corn, he pays me with his carcass with the profit stated above.

In conclusion, please give my respects to Mr. "Amateur Bacon Eater" and say to him, that as he seems to have a decided preference for the "long legged, lean alligator," and my preference is equally strong for the short legged, fat Berkshire, that I propose an exchange with him; and as I am somewhat keen to drive a bargain, I will even give him two for one, and my hearty thanks to boot. This proposition must, however, be accepted, before the next killing time. After that, it will be too late.

In the next, which will probably be the last of these hog-essays, I shall offer my views on the proper treatment of the hog. Wishing you all possible success in your laudable undertaking, allow me to subscribe myself your very sincere friend,

J. H. Turner.

WOOD CUTTING.

The Editor of the Boston Cultivator reprehends the practice, which is common here too, we think, of permitting trees to get old before they are cut. The consequences are indifferent fuel, and a great destruction of the surrounding growth in the falling of the tree. On the contrary, if the thick young growth is occasionally trimmed out, you have infinitely better fuel, and the stump will put up many more vigorous shoots. The Editor compares the man, who permits his fuel trees to get old, to one who fails to eat his fruit until it begins to decay. By the improved system, it is maintained, a much greater growth can be obtained from the same quantity of ground.

For the Southern Planter.

Mr. Editor,—Flowers have been called "the stars of earth," "the alphabet of the angels," and "the smiles of God." The love of flowers has been esteemed the joy of infancy, a charm for maturity, and the source of delightful souvenirs

for the rest of life. The study of flowers is said to fill our mind with agreeable ideas, to lead us through paths of pleasantness and ways of peace, and to fill us with a love of nature and nature's God. If these things are so, you still perhaps may find a place for some other curious plants from the scrap book of A NATURALIST.

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CURIOUS PLANTS.

Rhinanthera Coccinea.—This plant is the gem of flowers. It is found in the greatest perfection in the woods of Cochin China, where it so interlaces and festoons the trees that the whole forest becomes one mass of crimson and gold, of so intense a color that the eye can scarcely look upon it, exhaling a fragrance as refreshing as its colors are brilliant. This is a parisitical plant.

Avena Sterilis is a variety of oat, and is grown as a curiosity, under the name of "Animal Oat," on account of its singular hygrometrical properties. After its seeds have fallen, the strong beards are so sensible of alteration in the atmosphere, as to be kept in an apparently spontaneous motion, when they resemble some grotesque insect crawling on the ground.

Rhus Vernex.—This plant furnishes the true Japan varnish. The whole shrub is in a high degree poisonous; and its poison is communicated by *touch* or *smell.* In forty-eight hours after smelling or touching this plant, inflammation appears on the extremities, attended by burning and itching pustules.

Cocos Nucifera, or cocoa nut tree, grown in most places within the tropics. Some of these trees are deprived of their fruit buds in order that they may produce a drink called "Paviah Arrack." It is the employment of a certain class of men to climb to the top of these trees, in the evening, with earthen pots tied to their waists, which they fix there to receive the juice, which is regularly carried away before the sun has had any influence upon it. This liquor is sold by the natives under the name of *toddy*—in this state it is drank with avidity: after being kept a few hours, it begins to ferment, acquires a sharp taste, and a slight intoxicating quality. It is used for yeast, and forms an excellent substitute. A variety of this tree growing in the Sechelles Islands produces leaves from 12 to 15 feet long, and 7 to 8 broad, so that a single one is used to cover a whole family.

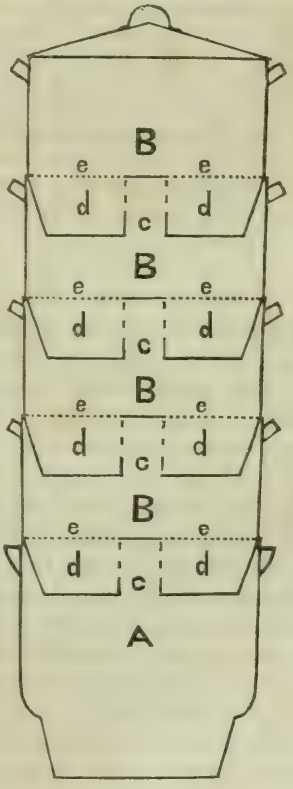
Asclepias.—One species of this plant, growing in Sierra Leone, has a juice of the color of blood, and Lindley says "if that plant had but grown in Palestine, it might be supposed to represent the enchanted tree which so surprised Tancred in the sorcerer's wood.

'When dreadful to his view
'The wounded bark a sanguine current shed
'And stained the grassy turf with streaming red.'"

Achras Mammosa.—This tree, a native of South America, grows thirty or forty feet high; it has leaves a foot long, and three inches wide; its flowers are cream colored, and are succeeded by large oral shaped fruit, covered with a brownish skin, filled with a thick luscious marmalade, in consequence of which, the tree is called the American Marmalade tree.

Sarvacœnia Flara.—This is called the side-saddle flower, from the resemblance of its stigma to a woman's pillion. Its leaves are tubular, and hold water, and are furnished with lids which are said to close over them in dry weather, so as to prevent the exhalation of the water, and in great droughts animals and birds have been seen to resort to them for drink. This plant grows in the bogs of Virginia and Carolina.

A STEAMER.



Mr. Editor,—As you seem to attach some value to a potato steamer, I send you a sectional drawing of one of the most useful culinary articles I have ever seen. It is probably the only one in this country, having been brought by my father from England, many years ago. It has been fitted to an ordinary cooking stove, and is now in daily use.

A is an iron pot in which the steam is generated. B B B are a continued range of tin ves-

sels, fitting, the first on the pot A, the balance in one another. Thus we have several apartments, in which various kinds of food may be cooked, and all, by the steam generated in the pot. Nor is there any possibility of a commingling of the one with the other, for, whilst the steam is made to pass through all, the flavor of the one can by no possibility get to the other. Thus, the steam generated in A passes through the side holes in the pipe (c) into the lower part, d d of the vessel B. e e is a false bottom, pierced with holes, upon which the food rests, and through which the steam finds its upward passage. The same process is continued through as many ranges as you choose to fit to your boiler. But the holes in the pipe (c) are an inch or two above the level of the real bottom d d of the tin vessel, consequently, the drippings from one vessel are caught in the bottom of the same, and can never get into the food below, without rising to the height of the holes in the pipe (c).

From the use of this vessel I have learned, that steaming was the best mode of cooking many other vegetables besides potatoes. If your readers, who are fond of good cooking, and that done with the greatest convenience, will only incur the trouble of providing themselves with this simple implement, I will guarantee they would not be without it for four times its cost.

Yours, J. B.

MAD DOGS.

The Editor of the American Farmer states, that the practice of worming dogs renders them innoxious to the poison of rabid animals. He says he knew a wormed dog to be bitten thirteen times by others, laboring under hydrophobia, without taking the infection. We never heard before that worming would do more than prevent the generation of disease in the natural way, and were inclined to consider even that a popular superstition. But here we have the most respectable testimony to the contrary. Surely if this fact were generally known, or even generally believed, no dog would be free from this operation, which we understand to be a simple one. If there is any preventive for this horrible disease, which almost mars the value of the noble animal who is the subject of it, it is well worth the while of medical men to test it. The friend of humanity would rejoice at the establishment of a principle, that would free mankind from the fear of this revolting malady.

GUM ON TREES.

A subscriber requests us to inquire for a remedy for the gum, which so frequently collects around the insertion of a bud in the peach tree. He says he has lost several fine trees from this cause.

For the Southern Planter.

We are all very anxious, Mr. Editor, to secure a good Secretary of the Treasury for the National Government, and look upon the financial department as one of the most extreme importance. In a Secretary we seek an individual who will, in the best manner, by hook or by crook, provide the means to meet the necessary expenses of the government. Suppose our country politicians who are, no doubt, as much devoted to their hobby as my uncle Toby was to his, should seek to indulge their favorite propensities in a similar manner—let each of them erect his own farm into a model government, and let him dub himself SECRETARY of the TREASURY. Let him remember that the ways and means to carry on his government must be provided, and that his character as a politician is at stake to see that they are not wanting. Here is an opportunity afforded every individual to conduct a government on exactly his own principles, and to prove to his unbelieving neighbors that his system is the best that can possibly be devised. The man that the people reject may, by this means, prove to them what a genius they have lost, whilst the country is sure to be benefitted by his operations, which cannot always be predicated of those who play the part of *public* politicians.

But jesting aside, Mr. Editor, I do consider this universal devotion to politics the besetting sin of the country. If the genius that is annually wasted in empty political brawlings was only devoted to the advancement of agriculture, if the general excitement, which is felt upon this subject, was turned upon one much more worthy of it, how greatly would the wealth and happiness of the country be increased.

I do not mean to say that a man should be ignorant of, or indifferent to, great political questions; but I do mean to assert, that many hours are bestowed upon heated and fruitless discussions that might be much more profitably employed. What a glorious day it will be for Virginia when her sons, who have ever been distinguished for their sagacity and wisdom, can be induced to permit *agriculture* to share at least with *politics* in their consideration. The same zeal, the same depth of thought, and the same indomitable spirit which have caused her to rank first in politics, would place her also in the front rank in agriculture. And, sir, the day, thank God, is coming, when this consummation, so devoutly to be wished for, will be attained. At this moment, the road to ambition lies through the fields of agriculture. Such is now the spirit abroad for this noble pursuit, that he who dis-

tinguishes himself in it, will be greeted with the applause of his admiring countrymen, and the time will shortly come, when the individual most distinguished for his knowledge of agriculture, will command a position superior to him who has attained the highest pinnacle of political fortune.

Yours, R. G. H.

VIRGINIA AXES.

We have, at our office, a specimen of axe manufactured by Messrs. J. F. Barnes & Co. of this place, which will compare, we believe, in point of finish, with any northern production whatever. Most heartily do we rejoice to find that so many of our wants are about to be supplied, and so well supplied too, by our own people. There are many manufacturing establishments in this city well worthy the farmer's notice, to which we intend, at a more convenient opportunity, to call his attention. In the meantime, we invite him to examine this beautiful production from the factory of the Messrs. Barnes. There are many advantages in purchasing an article made at home. The manufacturer, who warrants the article, is on the spot, and his pride and interest are most deeply excited to furnish you a good one. There is a great deal of repairing to be done, and specific orders to be given, that can never be supplied, without great inconvenience, by the foreign manufacturer. In short, the advantages of home establishments are so numerous, and so obvious, that we take it for granted, that the preference will always be given to the home producer, where the article is equal in quality, and not greater in price. These requisites are fully satisfied, by the article under consideration.

MISCELLANY.

BLUNDERS.

It so happens that some remarkably fine paintings in the world are defaced by most extraordinary oversights in the artist. These defects are sometimes not less singular, than amusing:

"In the chapel of one of the principal colleges in Paris, there was a picture representing the general-in-chief of the army of Egypt, attended by some of his aides-de-camp, paying a visit to the plague hospitals. Since the restoration of the Bourbon family to the throne of France, Bonaparte has been converted into Christ, and his aides-de-camp into apostles. The artist who has made these alterations, has not, however thought it necessary entirely to change the costume, and our Saviour appears in the boots of Napoleon.

"But, of all the blunders which artists have committed, none is perhaps so great as that of the painter, who, in a picture of the Crucifixion, represented the confessor holding out a crucifix to the good thief who was crucified with our Saviour."

THE YOUNG PEOPLE'S BOOK,

Is the title of a periodical laid on our table by Messrs. Randolph & Co. It is beautifully gotten up, and in its list of contributors enumerates some of the most distinguished names of the city of Philadelphia. From an observation of its contents, we are inclined to rank this little work very far above the great mass of *trash*, that flows from the monthly press. Its articles are well written, handsomely illustrated, and aim at something more than the mere gratification of a morbid desire for amusement. We extract the following as a specimen of the truths it inculcates:

PUNCTUALITY.

There are few particulars in which Washington may not serve as a model to the youth of America. He was a great and noble character, formed by self-instruction. One of his most striking traits was his remarkable punctuality. Many anecdotes are related of him which all go to establish the fact, that he regarded punctuality as a high moral duty. It undoubtedly is; and, moreover, it is one of the most important means of success in life. In both these points of view we would commend it to our young readers, and we wish to urge upon them the importance of forming early in life the habit of rigid punctuality.

Let us suppose the case of a young man setting up for himself in business. If he has formed this habit, its practice is easy. He keeps every appointment which he makes, without any painful effort. Every order for work or merchandize is executed on the very day and hour agreed upon; and every person who has dealings with him, learns to count upon his punctuality with the same confidence that he counts upon the daily rising of the sun. Whenever an order is to be given which imperatively demands despatch and certainty, he receives the preference; and he not only finds his business increasing among the most valuable customers, but his character is every day rising in the estimation of his fellow-citizens.

Look now at the reverse of this picture. A young man commences business with a sound capital and a host of friends. Confident of success, he neglects the duty of punctuality. He decides that a trifling omission in keeping his

engagements is easily overlooked and readily forgiven; and, so it is, for a time. But the customer, who is willing to be disappointed once, loses all patience when he has been disappointed ten times. He begins to compare notes with others, who have suffered in a similar manner, and the result is, that the delinquent is pronounced to be a person, on whose promise no dependance is to be placed. When things come to this pass, his character as a man of business is lost; and all the world knows that capital and friends are not long retained after character has departed. If he is not summarily ruined, he has to struggle through life against a thousand adverse influences; and can never know the happiness of ease and security.

To all our young readers, therefore, we say, form in early life the HABIT OF PUNCTUALITY. Be punctual at school, in the performance of your tasks, in the keeping of your engagements with your parents, your teachers, and even your play-fellows. Be punctual of your own accord, even where punctuality is not exacted by others. The habit is what you should form. What is habitual is easy; and if you begin early and resolutely, the formation of a habit of punctuality is just as practicable as the formation of a habit of negligence. One leads to honor and prosperity, the other to failure and disgrace.

NAMES ALTER THINGS.

A few years since, a tract of land belonging to North Carolina, was ceded to South Carolina. A young lady very *wisely* observed, "I am sorry father's plantation is in that tract; for every body says North Carolina is more healthy than South Carolina."

Richmond Markets, October 7th, 1841.

BUTTER—Mountain butter, wholesale 12 1-2 a 16 cts. for firkin; 20 cts. for roll.

COAL—12 a 16 cents per bushel.

COTTON—10 a 11 cents per pound.

CATTLE MARKET—Cattle on the hoof, $5 a $7 per hundred pounds according to quality. Rough Fat 5 a 7 cents per lb. Mutton $3 a $6, according to quality.

FISH—Mackerel, No. 3, $7. Herrings, No. 1, N. C. $3 50; No. 2, $3; Potomac cut, $3 25. Shad $8 50 per barrel.

FLOUR—Receipts are still small, and sales are confined to city dealers. Good brands are wanted for shippers, and would bring $6 25. The returns of our Inspector show a deficiency of 20,000 bbls. compared with the same quarter last year, which was also short. City Mills is held at $7 50.

GRAIN—Wheat $1 20 a $1 25 for red and white of the better qualities—merchantable may be quoted at $1 15 a $1 20. Corn—sales at 65 cents per bushel. Oats—much wanted, and good parcels would bring 40 a 42 cents.

LUMBER—Clear white pine $36; refuse clear $32—merchantable $22; refuse last sale at $14; flooring $15 a $25 per M.

LIME—$1, and dull—supply good.

MEAL—70 cents per bushel.

PROVISIONS—Bacon—Smithfield, 8 cents for a prime article; inferior 7 a 7 1-2; Western sides 5 a 6 1-2, as to quality; shoulders 4 a 6 cents. Stock of all kinds good—demand fair. Lard, 8 a 8 1-2—demand only for retail purposes.

PLASTER—Last sales at $3 25 at Rocketts.

SALT—$1 90 a $1 93 3-4 by the cargo.

TOBACCO—Sales have been a little animated this week with a shade of improvement. It is thought the frost has materially injured the crop in the mountainous districts.

FREIGHTS.

FOREIGN—Rates to London 30s. and to Liverpool 25s. Continent 30s. a 32s. 6d.

NEW YORK—Flour, per bbl. 25 cents—very little going. Coal, 6 1-2 cents per bushel. Tobacco, $2 50 per hhd., boxes 20 cents, kegs 25 cents.

PHILADELPHIA—Flour, none going. Tobacco, $2 50 per hhd., 20 cents for boxes, 25 for kegs—none going. Coal, 7 cents per bshel, Richmond measure.

ON THE CANAL—To Lynchburg and intermediate places, 10 cents per 100 lbs.

EXCHANGE.

FOREIGN—On London 13 a 13 1-4 per cent. premium.
DOMESTIC—New York Checks, 3 1-2 premium.
Philadelphia, 1-2 a 3-4 premium.
Baltimore, 1 1-2 a 1 3-4.
North Carolina Bank Notes, par.
Do. do. do. under $10, 1 discount.
South Carolina, par a 2 premium.
Savannah, 3 discount.
Augusta, 2 discount.
Alabama, 7 discount.
Tennessee, 8 discount.
Specie, 2 1-2 premium.
Northern exchange scarce and in demand.

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THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.* | Tillage and Pasturage are the two breasts of the State. *Sully.*

C. T. BOTTS, Editor. **Opposite Merchants' Coffee House, Main Street.**

VOL. I. RICHMOND, NOVEMBER, 1841. No. 10.

AGRICULTURAL BOTANY.

The following article is copied from the Farmers' Cabinet, and is from the pen of the celebrated Dr. Darlington of Chester County, Pa. Nothing is more wanting than a perfect understanding between the readers and writers of agricultural essays, as to the particular plants intended to be designated by particular names. The table is not only valuable as affording the scientific name of the common grasses, but also for the condensed information it affords of the properties of each variety. We fear very few will follow the Doctor's advice to make a collection for themselves; such as can be induced to undertake it, will, we are sure, find it not less amusing than profitable.

"As there seems to be a laudable spirit of inquiry awakened among the agriculturists, in various parts of our country, respecting the *Plants* which they are most interested in knowing,—and a desire manifested to be able to identify, with certainty, all those which are treated of in the agricultural journals,—I have supposed that the readiest and best mode of accomplishing that object, would be for each intelligent farmer to make a *collection* of all such plants; to have them carefully preserved, and *authentically labelled*, in a convenient volume, which he could refer to as a dictionary, or expositor, whenever he was in doubt, or wished to verify any particular species.

A collection of this kind, strictly limited to the plants in which he is immediately interested (whether *useful* or *pernicious*,) would be neither very bulky, nor difficult to procure,—and might be called THE FARMERS' HERBARIUM. One good specimen of each plant, collected when in its most perfect state of development, would be sufficient. It should be neatly pressed and dried, so as to exhibit its peculiar characters; and each species preserved in a separate sheet of paper,—accompanied with its appropriate *label*, containing the *scientific name* whenever it can be procured from good authority, and also all the *popular*, or *common names*, by which it is known,—designating the localities, or districts, whence such popular names are derived.

The importance of having the *scientific* name, and in fact, of knowing and habitually calling each plant by that name, will be obvious to every one, when it is recollected that the popular names are exceedingly variable and uncertain; and moreover, that the scientific names of plants convey clear and precise ideas of the objects intended, to every well-informed person throughout the civilized world. While there is nothing but endless misapprehension and confusion resulting from the use of local popular names of well-known plants, there is no difficulty in comprehending what is meant, when the scientific names are correctly employed. These scientific names can now be readily obtained from the books,—or from respectable botanists, who are always happy to impart information on such subjects. They can be acquired gradually, as opportunities offer; and when once obtained, and committed to writing on the labels accompanying the specimens, will be always at command, even if temporarily forgotten.

With these impressions, and with a view to promote an object which I consider at once useful, interesting and feasible, I propose to make out a list of such plants as every farmer ought to know, both by sight and by name. Not to swell the list inconveniently, I shall, for the present, limit the catalogue to those plants which daily present themselves to the notice of the agriculturist, in this region, either as valuable occupants of the soil, or as troublesome pests and worthless weeds, in our cultivated fields, meadows and pastures; omitting those which are usually confined to the gardens. Few persons, I apprehend, will question the utility of an accurate knowledge of the characters, and habits, of both the useful and pernicious plants. Such knowledge must always be important in the operations of agriculture; and it is just as disreputable for a farmer to be ignorant of the vegetable tribes which claim his attention, as it is for an artist to be unacquanted with the nature of his materials.

The first step towards a knowledge of objects, is unquestionably an acquaintance with their external characters,—an ability to discriminate species, and to recognize each, with certainty, whenever seen. We may then proceed to ascertain their several properties; and, by the use of a precise nomenclature, and accurate definitions, communicate our knowledge to others. This is true of all our researches in the material world, and especially so in what are called the

natural sciences. Natural history is emphatically a science of *observation* and *comparison*, by which we learn to identify and distinguish created beings; and no department of the science is more pleasing—as few, if any, are more useful—than the study of the vegetable creation. It is a study peculiarly appropriate to the agriculturist, whose chief concern is with the products of the soil.

As the literary, or professional man, finds both pleasure and advantage in a good stock of classical lore, so our farmers and planters would derive much benefit and gratification from a scientific acquaintance with the objects of their care: and we may indulge the hope that the day is not far distant, when instruction of that kind will be considered an indispensable branch of the farmer's education—when the natural sciences will be regarded as the *classics of agriculture*. To aid in preparing the way for this desirable state of things, is the motive which has prompted this inceptive essay. The catalogue of plants here furnished, is *calculated*, as the almanacs say, for the *meridian* of Chester county, Pennsylvania; but with some slight additions and modifications, it may be adapted to any part of the United States. The scientific names employed are those adopted in the *Flora of Chester County*—in which work all the plants, here enumerated, may be found described in detail. I have followed the arrangement, also, of that *Flora*—not because it is the best—but because it will be most convenient for those who may choose to refer to it for the descriptions.

Catalogue of a proposed FARMERS' HERBARIUM, *or of such Plants as Agrtculturists ought to be acquainted with.*

There are some *Cyperaceous* plants, such as *Club Rushes*, *Sedges*, *&c.*, which are frequent, and rather troublesome, in low swampy grounds, and therefore ought to be known by name and character to the farmer. The following are the most remarkable, in *Chester County*.

1. CYPERUS REPENS, *Ell.* A very troublesome plant in the Southern States; but happily rare as yet in this region.

2. SCIRPUS PALUSTRIS, *L.*
3. S—— OBTUSUS, *Willd.*
4. S—— TENUIS, *Willd.*

} Species of *Club Rush*, frequent in wet grounds.

5. S—— LACUSTRIS, *L.* Common *Bull Rush.* There are several other species of *Scirpus* about our low, wet grounds; and all worthless.

6. CAREX ACUTA, *L.*
7. C—— TENTACULATA, *Muhl.*
8. C—— MULTIFLORA, *Muhl.*
9. C—— STIPATA, *Muhl.*
10. C—— SCOPARIA, *Schk.*

} *Sedges.* A numerous family of worthless plants, of which these species are most common in our wet meadows,—often forming large tufts, or *tussocks*.

The principal *Grasses*, on the farms of Chester county, noted either for their value, or as being worthless and troublesome, are the following:—

11. DIGITARIA SANGUINALIS, *Scop. Crab Grass: Finger Grass.* Frequent in gardens and Indian-corn-fields; rather troublesome.

12. PANICUM CAPILLARE, *L.* A worthless grass; common in corn-fields and sandy pastures.

13. P—— CRUS GALLI, *L. Cock's-foot Panic Grass.* A coarse weed-like grass; common about drains of barn-yards and moist places. There are several other species of *Panicum* in our meadows and pastures; and all worthless to the farmer.

14. SETARIA VIRIDIS, *Beauv. Green Foxtail: Bottle Grass.* A worthless grass; frequent in corn-fields and pastures.

15. S——— GLAUCA, *Beauv. Foxtail Grass.* A common, worthless grass; usually abundant in stubble-fields, orchards and pastures.

16. S——— VERTICILLATA, *Beauv.* Another worthless species; becoming frequent about gardens and cultivated lots.

17. S——— GERMANICA, *Beauv. Millet: Bengal Grass.* Affording good hay; and is often cultivated, both for hay and for its seeds.

18. CENCHRUS TRIBULOIDES, *L. Bur Grass: Hedge-hog Grass.* A most pernicious pest in cultivated grounds; abundant in New Jersey—but fortunately rare, as yet, in Chester county.

19. AGROSTIS VULGARIS, *L. Herd's Grass*, of Pennsylvania, but not of New York and New England: often called *Red-top*. A Grass of some value, especially in swampy grounds, and often cultivated; but it is not highly esteemed here. There are several other species of *Agrostis*, and of grasses allied to that genus; but they are not generally considered of much value.

20. PHLEUM PRATENSE, *L. Timothy: Herd's Grass*, of New York and New England; a well-known and valuable grass—generally cultivated in company with red clover.

21. ANTHOXANTHUM ODORATUM, *L. Sweet-scented Vernal Grass.* Common in meadows and pastures: remarkable for its fragrance; but not very highly esteemed by our farmers.

22. Avena Stativa, *L.* *Common Oats.* Everywhere cultivated.

23. A—— Elatior, *L.* *Oat Grass: Grass of the Andes.* Sometimes cultivated, but not highly esteemed.

24. Bromus Secalinus, *L.* *Cheat*, or *Chess.* A troublesome grass in wheat fields; well known to every farmer.

25. B—— Arvensis, *L.* *Brome Grass.* Frequent in pastures and moist meadows: makes a tolerable hay.

26. Festuca Pratensis, *Huds.* *Meadow Fescue.* A highly valuable grass; growing spontaneously and abundantly, in all our rich meadows and pastures.

27. Poa Pratensis, *L.* *Smooth-stalked Meadow Grass: Green Grass: Blue Grass*, of Kentucky; but not of other districts. This is decidedly the most valuable of all our pasture grasses; and *comes in*, spontaneously, in all our rich, calcareous soils.

28. P—— Trivialis, *L.* *Rough-stalked Meadow Grass.* Frequent in moist meadows and pastures. It closely resembles the preceding species, and is a valuable grass; but not so valuable as that other.

29. P—— Compressa, *L.* *Flat-stalked Meadow Grass: Blue Grass.* Sometimes called *Wire Grass.* Not so much esteemed as the two preceding species; but in good land it affords a valuable, nutritious pasture. It is sometimes rather troublesome in cultivated grounds. There are several other species of *Poa* on our farms, but greatly inferior in value to these, and some of them quite worthless. The *P. Pungens*, which has been spoken of in the journals of late, is mostly a *woodland* species and not valuable.

30. Dactylis Glomerata, *L.* *Orchard Grass.* A valuable grass,—more so for pasture than for hay; and often cultivated.

31. Eleusine Indica, *Lam.* *Dog's-tail Grass.* Very common in lanes and wood-yards. Cattle and hogs are fond of it.

32. Secale Sereale, *L.* *Common Rye.* Much cultivated in some districts.

33. Hordeum Vulgare, *L.* *Four-rowed Barley.* Much cultivated.

34. H——— Distichum, *L.* *Two-rowed Barley.* Ditto.

35. Triticum Sativum, *L.* *Wheat.* Universally cultivated; and several *varieties*, both awned and awnless, have been successively preferred.

36. T——— Repens, *L.* *Couch Grass.* In Virginia called *Wire Grass.* A grass of some value; but so difficult to subdue, that it is considered a pest where it abounds. It is rare in Chester county.

37. Lolium Perenne, *L.* *Ray Grass*, or *Rye Grass.* Often found in our meadows, and sometimes cultivated. It is a grass of considerable value; but not much attended to in this country.

38. Andropogon Nutans, *L.* *Wood Grass: Indian Grass.* A worthless grass, often abundant in poor, neglected old fields. There are two or three other species, equally worthless, often to be met with.

39. Sorghum Saccharatum, *Pers.* *Broom Corn.* Well known, and much cultivated. Two or three other species occasionally cultivated.

40. Holcus Lanatus, *L.* *Feather Grass: White Timothy.* A grass of indifferent quality; frequent in meadows.

41. Leersia Oryzoides, *L.* *Cut Grass: Wild Rice.* A worthless grass; often rather troublesome along swampy rivulets.

42. Zea Mays, *L.* *Indian Corn.* Cultivated by every body.

43. Tripsacum Dactyloides, *L.* *Gama Grass: Sesame Grass.* A stout, coarse grass, which has attracted some notice in the west; but is probably unworthy of culture. It is but little known in Chester county. The 33 *grasses*, here enumerated, are perhaps the best known in this region. About 20 of them may be ranked among the valuable plants (some 12 or 13 being more or less cultivated); and the residue are regarded rather as weeds.

44. Dipsacus Sylvestris, *L.* *Wild Teasel.* A coarse, biennial weed; quite worthless, and rather a nuisance in some neighborhoods.

44. Plantago Major, *L.* *Common*, or *broad-leaved Plantain.* A well-known, worthless weed, in lots, and about houses.

46. P——— Lanceolata, *L.* *English Plantain: Buck's-horn Plantain: Ripple Grass.* Cattle feed upon this species, and it has been sometimes cultivated for a sheep pasture; but our farmers dislike it—especially on account of its seeds mingling with those of red clover, and reducing the value of the latter.

47. Symplocarpus Fœtida, *Nutt.* *Skunk Cabbage.* A frequent nuisance in swampy meadows.

48. Lithosperum Arvense, *L.* *Stone Weed.* A worthless weed; frequent in pastures.

49. Echium Vulgare, *L.* *Blue Weed: Blue Devils.* A highly pernicious weed; frequent in Maryland; but rare, as yet, in Chester county.

50. Echinospermum Virginicum, *Lehm.* *Beggar's Lice.* A frequent weed in pastures, and along fence-rows; the burr-like fruit often matting the fleeces of sheep, and manes of horses.

51. Convolvulus Arvensis, *L.* *Bind Weed.* A worthless vine, introduced into some cultivated grounds, and exceedingly difficult to eradicate.

52. C——— Batatas, *L.* *Sweet Potato.* A well known esculent; often cultivated here, but still more in New Jersey, and in the South.

53. Datura Stramonium, *L.* *Jamestown Weed*, or *Jimson: Thorn Apple.* A well known noxious weed; in waste grounds, &c.

54. Verbascum Thapsus, *L.* *Common Mullen.* A worthless biennial, abounding in the fields of slovenly farmers.

55. V—— Blattaria, *L.* *Moth Mullen.* A frequent weed in pastures; but not so troublesome as the preceding.

56. Solanum Nigrum, *L.* *Night-Shade.* A noxious weed, in waste grounds.

57. S—— Tuberosum, *L.* *Round Potato: Irish Potato.* Universally known, and cultivated for its valuable *tubers*, of which there are several *varieties*. The *Lycopersicum* or *Tomato*, is also much cultivated, in gardens, for its esculent *fruit*.

58. S. Carolinense, *L.* *Horse Nettle.* A most pernicious weed, and extremely difficult to eradicate; happily rare, as yet, in this region.

59. Lobelia Inflata, *L.* *Eyebright: Indian Tobacco.* An acrid weed, frequent in pastures. It has been suspected as the cause of *slabbering* in horses, but the fact is not well ascertained. It is the famous medicine of the *Thompsonian Doctors*.

60. Cuscuta Europæa, *L.* *Flax Vine: Dodder.* A pernicious vine, frequent among cultivated flax.

61. Chenopodium Album, *L.* *Lamb's Quarters: Goose-foot.* A coarse weed, common in gardens and cultivated lots.

62. Beta Vulgaris, *L.* *Garden Beet: Sugar Beet.* A valuable esculent; the *variety*, called *Sugar Beet*, much cultivated for feeding stock in winter. The *B. Cycla*, or *Mangel Wurtzel*, is also cultivated but not extensively.

63. Cicuta Maculata, *L.* *Water Hemlock: Wild Parsnep: Spotted Cowbane.* A poisonous weed; frequent in wet meadows.

64. Archemora Rigida, *Dc.* *Cowbane.* A weed, said to be highly poisonous to cattle; frequent in low, swampy meadows.

65. Pastinaca Sativa, *L.* *Common Parsnep.* A valuable esculent; chiefly cultivated in gardens, but often straying into the borders of fields, and becoming a troublesome weed.

66. Daucus Carota, *L.* *Carrot: Wild Carrot.* The cultivated *variety* is a valuable esculent; but the *Wild Carrot* is becoming a serious nuisance on many farms.

67. Sambucus Canadensis, *L.* *Elder Bush.* A troublesome shrub, in many enclosures—especially along fence-rows, hedges, and borders of fields; giving them a slovenly appearance.

68. Rhus Glabra, *L.* *Common*, or *Smooth Sumach.* A frequent nuisance, in poor old neglected fields, and along fences.

69. R—— Radicans, *L.* *Poison Vine: Poison Oak.* A frequent pest along fence-rows, and clinging to old stumps and trees; poisonous to many persons. *R. Venenata*, *Dc.*, is a very poisonous species, occuring in swampy thickets, along rivulets.

70. Linum Usitatissimum, *L.* *Common Flax.* A plant well known for its valuable fibrous bark, and oily seeds; but sparingly cultivated, of latter years, in this district.

71. Allium Vineale, *L.* *Garlic: Crow Garlic.* An obnoxious and troublesome plant, especially in dairy pastures, and among wheat crops.

72. Ornithogalum Umbellatum, *L.* *Ten O'Clock.* A plant which has escaped from the gardens, and is a vile pest on many farms.

73. Juncus Effusus, *L.* *Common Soft Rush.* A worthless plant; common in low grounds, and often forming tufts, or *tussocks*.

74. Veratrum Viride, *L.* *Swamp Hellebore: Indian Poke.* A frequent weed in swampy grounds.

75. Rumex Crispus, *L.* *Sour Dock: Curled Dock.* A troublesome weed, in moist, rich grounds.

76. R—— Obtusifolius, *L.* *Bitter Dock.* Also a worthless, troublesome weed.

77. R—— Acetocella, *L.* *Sheep Sorrel.* Another worthless species, and often so abundant as to be a nuisance.

78. Polygonum Aviculare, *L.* *Creeping Knot Grass.*
79. P—— Erectum, *L.* *Erect Knot Grass.*
80. P—— Punctatum, *Ell.* *Water Pepper.*
81. P—— Persicaria, *L.* *Lady's Thumb.*
82. P—— Pennsylvanicum, *L.*

All worthless; and often troublesome about houses, lots and waste grounds.

83. P—— Sagittatum, *L.*
84. P—— Arifolium, *L.*

These two species are commonly called *Tear-Thumb*, and are often abundant in swampy meadows.

85. P—— Convolvulus, *L.* *Climbing Buckwheat.* Frequent in wheat fields.

86. P—— Fagopyrum, *L.* *Buckwheat.* The only valuable species of this numerous genus known here. It is much cultivated in new and hilly grounds, though considered a severe crop on good soils.

87. Agrostemma Githago, *L.* *Cockle.* A troublesome pest among wheat.

88. Phytolacca Decandra, *L.* *Pokeberry Bush.* A well-known, coarse weed; frequent in rich soils and new grounds.

89. Cratægus Crus Galli, *L.* *Cockspur* or *New-Castle Thorn.*
90. C—— Cordata, *Ait.* *Washington Thorn: Virginia Thorn.*

Both these species of *Cratægus* are employed in *hedging*—the latter to a considerable extent in this country, though the *former* is probably the *better* for that object.

91. Potentilla Canadensis, *L.* *Cinquefoil.* A worthless little weed; common in poor, old neglected fields.

92. Rubus Occidentalis, *L.* *Raspberry.*
93. R—— Villosus, *Ait.* *Blackberry.*
94. R—— Trivialis, *Mx.* *Dewberry.*

These three species of *Briar*, though yielding pleasant fruit, are rather troublesome intruders in our fields and pastures.

95. Rosa Carolina, *L.* *Swamp Rose.* Annoying weeds, in low grounds.

96. Portulaca Oleracea, *L.* *Purslane.* A common weed, in gardens and corn-fields.

97. Papaver Dubium, *L.* *Field Poppy.* An introduced weed; becoming a nuisance on some farms.

98. Hypericum Perforatum, *L.* *St. John's-wort.* A pernicious and troublesome weed; common in pastures.

99. Ranunculus Bulbosus, *L.* *Butter-cup: Crow-foot.* Worthless; and becoming a nuisance in some meadows.

100. Nepeta Cataria, *L.* *Catmint.* A common weed, in waste grounds.

101. N—— Glechoma, *Benth.* *Alehoof: Ground Ivy.* A frequent weed about gardens, lots, and along fences.

102. Lamium Amplexicaule, *L.* *Dead Nettle: Hen Bit.* A common weed, in gardens and cultivated lots.

103. Leonurus Cardiaca, *L.* *Motherwort.* A troublesome pest about gardens, houses, and in waste grounds.

104. Linaria Vulgaris, *Mœnch.* *Toad-flax: Ransted Weed.* A vile nuisance in our pastures and along fence-rows.

105. Verbena Urticæfolia, *L.* *Vervain.* A worthless weed, in our pastures.

106. Camelina Sativa, *Crantz.* *Wild Flax.* A weed; frequent among flax, and other cultivated crops.

107. Capsella Bursa Pastoris, *Mœnch.* *Shepherd's Purse.* A troublesome weed, in cultivated grounds and pastures.

108. Lepidium Virginicum, *L.* *Wild Pepper Grass.* A worthless weed; the reddish-brown *seeds* often occur among *Timothy seed.*

109. Sisymbrium Officinale, *Scop.* *Hedge Mustard.* A common weed, in waste grounds, lanes, and borders of fields.

110. Brassica Campestris, *L.* *Turnip-rooted Cabbage.* A *variety* of this, called *Ruta Baga*, or *Swedish Turnip*, is sometimes cultivated for stock.

111. B——Rapa, *L.* *Common Turnip.* Generally cultivated. The *B. Oleracea*, or *Common Cabbage*, in its numerous *varieties*—and the *sub-species*, called *Cauliflower*, and *Broccoli*—are also much cultivated; but the culture is chiefly confined to gardens.

112. Malva Rotundifolia, *L.* *Running Mallows.* Common weeds, about gardens, houses, and cultivated lots.

113. Sida Abutilon, *L.* *Indian Mallow.* A troublesome weed, in cultivated lots and waste grounds.

114. Medicago Sativa, *L.* *Lucerne.* A valuable plant for pasture and hay in some regions, but very little cultivated in Chester county.

115. Trifolium Arvense, *L.* *Stone Clover: Welsh Clover: Rabbit-foot: Hare's-foot Trefoil.* A worthless species; often abundant in poor old fields.

116. T—— Pratense, *L. Red Clover.* Highly valuable, and generally cultivated.

117. T—— Repens, *L. White Clover: Dutch Clover.* Common in our fields, and much esteemed as a pasture, though rarely cultivated.

118. Arctium Lappa, *L. Burdock.* A well-known nuisance, in waste grounds, &c.

119. Carduus Lanceolatus, *L. Common Thistle.* A common pest on good land.

120. C—— Arvensis, *Smith. Canada Thistle.* The vilest nuisance which has yet invaded our farms. Though not common, it has got possession in several localities, and will be found exceedingly difficult to eradicate. There are three or four other species among us, but not so troublesome as these.

121. Cichorium Intybus, *L. Wild Succory.* A worthless weed; becoming frequent in the northern districts of Chester county.

122. Leontodon Taraxacum, *L. Dandelion.* A common, well-known weed.

123. Sonchus Oleraceus, *L. Sow Thistle.* A frequent weed, in cultivated lots.

124. Vernonia Præalta, *Willd. Iron Weed.* A troublesome pest, in moist meadows.

125. Eupatorium Perfoliatum, *L. Thorough-stem: Thorough-wort.* A frequent weed, in wet meadows and low grounds. Generally known as possessing medicinal properties.

126. Solidago, *L. Golden Rod.* A numerous genus; of which some of the species abound as weeds, in old fields and along fence-rows.

127. Aster, *L. Star-wort.* Another numerous family; some of which (as *A. Tenuifolius*, or *Ericoides*, *L.*) are troublesome weeds in our pastures.

128. Erigeron Canadensis, *L. Horse-weed.*
129. E—— Strigosus, *L. Flea-bane.*
130. E—— Heterophyllus, *Muhl.*
} Worthless weeds; generally abundant in our pastures, and especially in the first crop of upland meadows.

131. Xanthium Strumarium, *L. Clot-bur.* A common nuisance, in waste grounds, roadsides, &c.

132. X—— Spinosum, *L. Thorny Clot-bur.* A most vile pest, wherever it appears; rare, as yet, in Chester county.

133. Ambrosia Trifida, *L.* A coarse, worthless weed; in waste grounds, fence-rows, &c.

134. A—— Elatior, *L. Bitter-weed: Rag-weed.* A common nuisance; generally abundant in stubble-fields, after harvest.

135. Bidens Chrysanthemoides, *Mx. Beggar Ticks.* A frequent nuisance, in swampy meadows, along rivulets, &c.

136. B—— Frondosa, *L.*
137. B—— Bipinnatifida, *L.*
} *Spanish Needles.* Troublesome pests about gardens and cultivated lots.

138. Anthemis Cotula, *L. Stinking Chamomile: Dog's Fennel: Richardson's Pink.* A troublesome, fetid little nuisance; common in waste grounds, lanes, and pasture lots.

139. Achillea Millefolia, *L. Yarrow: Milfoil.* A common weed in our pastures; considered entirely worthless here, though English writers speak of it as being food for cattle.

140. Chrysanthemum Leucanthemum, *L. Daisy: Ox-eye Daisy.* A vile pest; becoming very abundant on many farms in the north-eastern portion of our county, and will doubtless soon pervade the whole country.

141. Gnaphalium Polycephalum, *L. Life Everlasting.* A frequent weed, in old fields and pasture-grounds.

142. Senecio Hieracifolius, *L. Fire-weed.* A coarse weed; common in new grounds, especially in and around spots where brush heaps have been burnt.

143. Euphorbia Hypericifolia, *L. Spurge: Eyebright.* An acrid little weed, full of milky juice; common in pastures and cultivated grounds. This, like the *Lobelia*, has been suspected of causing the *slabbers* in horses: how justly, has not been ascertained.

144. Urtica Pumila, *L. Rich Weed.* A common weed, in rich moist grounds, about houses, &c.

145. U—— Dioica, *L. Nettle.* A well-known pest, in waste grounds, &c.

146. Amaranthus Albus, *L.* A coarse, branching weed; about barn-yards and waste grounds.

147. A—— Hybridus, *L.* A coarse, troublesome weed, in gardens and cultivated lots.

148. A—— Spinosus, *L.* A still more pernicious species; but rare, as yet, in this region.

149. Cucurbita Pepo, *L. Pumpkin.* Generally cultivated among Indian corn, &c. as food for stock.

150. Smilax Caduca, *L. Green Briar.* A troublesome nuisance, in poor, old neglected fields. The *S. Rotundifolia*, *L.* is another well-known pest, in thickets and clearings.

The foregoing catalogue comprises the more obvious of the plants known to our farmers, either for their usefulness, or as weeds and pests. Of the *useful plants*, there are but about thirty-five species in the list, of which some twenty-five are more or less objects of *field culture;* leaving the large proportion of more than *three-fourths* of pernicious or worthless weeds, to be extirpated, or

kept in due subjection. To do this, requires both skill and vigilance; and every one will admit, that an important preliminary step will be to acquire an accurate knowledge of the plants to be dealt with—to know them by sight, by name, and by character. Having made himself botanically and practically acquainted with the species here enumerated, the intelligent farmer may gradually and readily extend his knowledge to other less important plants, which he finds on his grounds; and also to the various species usually found in the *garden;* as well as to the several kinds of timber trees and shrubs, in the *woodlands.*

Such knowledge will not only be practically useful, in many ways, but will be found highly interesting to inquiring minds. It will, moreover, tend to elevate the intellectual character of agriculturists to that rank which is due to a noble profession, and to which every American farmer should earnestly aspire.

In conclusion, I will add, that, if the suggestions here made should find favor with any of our Chester county farmers, and they should think proper to commence collections of such plants as they find on their premises, whether of an useful or pernicious character, it will give me great pleasure to assist them, to the extent of my ability, in determining the names and properties of those occupants of the soil.

WM. DARLINGTON.

West-Chester, Penn., Aug. 25, 1841.

ECONOMY OF LABOR.

The following extract from the Farmer's Magazine, whilst it affords some useful hints upon the construction of farm buildings, also exhibits a minuteness of attention to the economising of labor, that will surprise some of our readers.—*There*, it is very properly considered, that the quantity of labor required, regulates the cost of production, and, consequently, that, *labor saved, is money made;* notwithstanding its cheapness, in England, this golden rule is never forgotten; and the farmer is constantly upon the alert, by the exercise of his ingenuity to lessen his labor, and increase his profits:

"In selecting the site of farm-offices it is desirable to combine in the greatest degree which circumstances admit of, the following objects:—proximity and easy access to a public road; a situation central, as regards the tillage-land, and so as to communicate with all parts of it by the levellest road possible, as the intervention of a single hill that could be avoided may make the difference between two horses in a cart and one. A southerly aspect; as cattle are found to thrive better and to fatten sooner, in folds open to the sun, than in those from which his rays are excluded. A command of water; so that a supply may be conveyed through the different parts of the buildings, and if the grounds afford it in sufficient quantity, where it can be brought and collected to work the thrashing machine, and thence conveyed away, with little expense and without injury, or, it may be, with benefit to the adjoining lands; where a sufficient supply of water cannot be had, the cheapest and best power is steam, if coals be within a moderate distance; water enough for that purpose may be collected, if a spring is not at hand, from the roofs of the offices, if preserved in a tank made in a shady situation and lined with clay or bricks. If the economy of labor is to be studied in fixing the site of farm buildings, it is not less to be attended to in their construction and arrangement; they commonly form three sides of a square open to the South; the highest buildings being on the North side, and those of a lower description filling up the East and West. The stack-yard is on the North side of the square, and the barn containing the thrashing-machine projects into it at right angles with the line of hovels which constitute the northern side of the square, the straw being thrown from the rakes into a large barn or straw-house in the centre of that range, where it is piled up for use. It is of consequence that the barn be in the centre of the range, because the straw to supply the cattle is carried out right and left, and only to half the distance which much of it would require to be carried if the barn stood in any other situation; the same reason holds with regard to corn which is being thrashed and intended to be laid up in granaries: grain keeps much better in granaries that are over open hovels, than those that are over close houses in which horses or cattle of any kind are tied up: and by this arrangement the granaries are made over the hovels, which extend from each side of the barn, and the corn is carried to them from the dressing floor below, without being taken from under the same roof, or the sacks are drawn up by a pulley and tackle worked from the wheel of the thrashing machine whether driven by water or steam, and conveyed on hand-barrows with wheels to all parts of the granaries; from which again they are loaded into carts through trap-doors in the floor, below which the carts are placed within the hovels. The saving of labor attending the laying up and removing of corn from granaries so situated, as compared with others at a distance from the thrashing barn, is very obvious. It is desirable for the same reason that the straw barn should stand the cross way of the thrashing barn, and not in the same range with it, so that the rake of the machine may deliver the straw into the middle and not the end of it; in this way the straw has only to be carried half the length of the house instead of the whole;

and when two kinds of straw are in use, one for fodder and another for litter, they can be kept quite distinct, and are easily taken out by leaving an open space between them. Peculiar situations may very properly render deviations from these general rules at times right and necessary, but where so important a consideration as the economy of labor is involved, and that for a long course of years, as in the erection of an extensive and permanent set of farm buildings, too much attention cannot be paid to it in the arrangement to be adopted.

Dilston, 18*th Feb.*, 1841.

BREWERS' GRAIN.

Mr. Buckland, in the Farmer's Magazine, gives an account of a most prodigious crop of hay produced by scattering brewers' grains over an indifferent meadow. He advances the opinion that vegetation is most rapidly promoted by manuring plants, in general, with their own species, in a state of decay.

MANURES.

Investigations are going on in the scientific world to ascertain, by an analysis of the constituents of certain plants, the applicability of particular manures to their production. It is probable that, in this way, some very satisfactory results may be obtained. A "Table of Manures," made out on this principle by Mr. John Robinson, has already been published in London, of which we hope to obtain a copy very shortly.

PLOUGHING.

The following extract from Chaptal's Agricultural Chemistry, shows the necessity of working a crop, especially during a drought:

"The air may be considered as a vehicle, constantly loaded with a quantity of water in vapour, of which the coolness of the night causes it to deposit a part upon the earth. The surface of the ground and the leaves of plants are often moist in the morning: the return of the sun, and the heat of the day, evaporate this liquid, to be deposited again at sunset, and during the night; thus, by an alternate movement, determined by the changes in the temperature of the atmosphere, at different periods of the twenty-four hours, water is constantly applied to plants, to preserve them from the excess of heat, which would wither and dry up their organs.

"The aqueous vapours suspended in the air begin to be condensed and precipitated at sunset, and with them is deposited the greatest part of the emanations which have arisen from the earth during the day; these exhalations, though beneficial to vegetation, are almost always injurious to man, and it is not without reason that he fears and shuns the night damps. In southern climates, where the heat of the sun is more intense, and rains less frequent than in the northern, vegetation is supported by the dews, which are very abundant. In order that the dews of night may produce their best effects upon vegetation, it is necessary that the soil should unite certain qualities, which it does not always possess.

"When the soil is hard and compact, and forms, by the action of the air, an impenetrable crust, the dew is deposited upon the surface, and evaporated by the rays of the sun, without having moistened the roots of the plants or softened the earth around them; so that, of the organs that serve to convey nourishment to the plants, the leaves are the only ones benefitted by the dew, while the roots, which are the principal vehicles of nutriment, when the plant is fully developed, are not in any degree benefitted by it.—It is necessary in such cases that the soil should be softened, lightened, and divided, so that the air may convey the water with which it is charged to the roots of the plants, and to every part of the earth surrounding them, to a certain depth; thus the plant can imbibe, through all its pores, the reviving moisture; and that which it received by its roots is more lasting than that which it absorbs in any other way, because the roots being sheltered from the rays of the sun, evaporation takes place less rapidly, and the moisture is retained, whilst the leaves are speedily dried by the heat. Besides, that earth which is most easily affected by the dews yields most readily to the action of the roots, whether it be to fix the plant firmly, by their extension, or to draw from the soil its nutritive properties.

"This explains in a natural manner the origin of a custom observed by all agriculturists, and of which all acknowledge the advantages. When vegetables, such as peas, beans, potatoes, and other roots, are sown in furrows, at equal distances from each other, the soil in the intervals is hoed or dug with the utmost care, and thus rendered light, soft, and favorable to the air; whilst at the same time weeds, which would be hurtful to the cultivated plants by depriving them of nourishment afforded by the ground, are destroyed, and the soil rendered more fit to receive the rain and convey it to the roots. I do not deny that these benefits are real, but I hold them to be secondary, and subordinate to the advantage derived from opening access to the air, and permitting it to deposit its dews upon the roots, and upon the earth in contact with them.

"I have uniformly observed the effects of this method to be equally speedy and favorable in the cultivation of beet-roots, and I have never employed any other to restore their vegetation to

its freshness, when they become yellowish and drooping; in three or four hours it will become a beautiful green, and the leaves spread themselves out, although no rain may have fallen; and this often when the soil had not contained a single weed. I have observed the same effect produced upon the other culinary roots.

"In the South of France, where it hardly ever rains during the summer, the foot of each setting of the vine is laid bare, by digging around it a circular trench, deep and wide enough to contain, uncovered, the stump, and the radicles proceeding from it; and the opening is speedily covered over by the leaves and branches. It is evident that this method has no other advantage than that of facilitating the access of the air to the roots, that it may deposit there the dews with which it is more abundantly charged than in cold climates—if it were not thus, this practice would expose the vines to be dried up by the scorching heat of the sun."

TRENCHING.

We have been lately furnished with the experience of a very judicious manager in favor of the system of trenching, recommended by Cobbett for garden purposes, and published in an early number of the Planter. The propriety of turning up the subsoil, or virgin earth, involves the old question of deep or shallow ploughing which, we believe, has been chiefly a subject of doubt, because it is one dependent upon circumstances. Certain it is, that there are subsoils, that contain some of the necessary constituents of vegetation in a high degree. Amongst these, may be mentioned the mineral alkalis. All soils are supposed to have been formed, originally, from the separation and solution of rocks—this operation, commenced by the carbonic acid of the atmosphere, is continued by the roots of plants. The alkalis of the soil are by this process dissolved and used up by the plant. The quantity of potash obtained from vegetables shows that they draw this article from the earth in great abundance—unless replenished by artificial means, the stock is exhausted. But, if we go deeper than the roots of plants have penetrated, we turn up a soil which, by the new action of the carbonic acid, afforded by the atmosphere and the roots of plants, becomes more thoroughly disintegrated, and thereby yields the necessary supply of alkali. Upon this point, Liebig remarks:

"The first colonists of Virginia found a country, the soil of which was like that mentioned above." "Harvests of wheat and tobacco were obtained for a century from one and the same field without the aid of manure; but now, whole districts are converted into unfruitful pasture land, which, without manure, produces neither wheat nor tobacco. From every acre of this land there were removed, in the space of one hundred years, 1200 lbs. of alkalies, in leaves, grain and straw; it became unfruitful, therefore, because it was deprived of every particle of alkali, which had been reduced to a soluble state; and, because that which was rendered soluble again in the space of one year, was not sufficient to satisfy the demands of the plants. Almost all the cultivated land in Europe is in this condition. Fallow is the term applied to land left at rest for farther disintegration. It is the greatest possible mistake to suppose that the temporary diminution of fertility in a soil is owing to the loss of humus: it is the mere consequence of the exhaustion of the alkalies."

In ploughing though, when we turn up the new, we turn down the old soil; and whether we are to profit by the exchange will depend upon the particular constituents of each. We may, *possibly*, turn down a rich loam, whilst we bring to the surface an unimprovable subsoil. In this case, which, we believe, very seldom occurs, we hear of the injurious effects of deep ploughing. By stirring deeply, we, at any rate, secure the advantage of loosening the earth, and thereby admitting the air, to a greater depth; and if the top soil is not turned under *very* deep, we place the nutriment it may afford just in the way of the roots of plants. Our advice is then, plough *deep;* you will be right nine times out of ten.

Mr. Towers, in an article published lately in the British Farmer's Magazine, asserts, that potatoes, and some other vegetables, will be found to flourish in a very extraordinary manner upon a soil newly turned up. He says:

"In 1830 I had a striking example of the good and evil of raising the soil of the substratum to the surface. I had the garden trenched in portions, two and three spades deep. In one portion we brought up a deep orange, ochrous loam, abounding with flint stones and aluminous adhesive masses; this soil, had, surely, never seen the light, or imbibed the air. I arrived on the property after the first week of June, and therefore, could not effect this trenching till the end of the month. Then, or early in July, seed of Portsmouth broccoli was sown: the season till August proved showery. The plants, when ready, were transplanted in this new loam, and,

late as it was, they grew surprisingly: the winter of 1830 it was very snowy, but not rigorously frosty. However, no plant was lost, and when the growing season commenced, the growth was surprising, the yield great, the heads large, and of a quality that I never since have been able to rival."

VINEYARDS.

It is asserted, upon good authority, that the trimmings of grape vines, chopped fine and hoed in, furnish the most bountiful supply of manure for the succeeding crop. Circumstances are daily coming to light, that lead to the inference, that decayed portions of a plant form the very best means for its reproduction.

EPIDEMIC.

An epidemic has lately made its appearance amongst the cattle of England, which like the cholera, seems to have travelled progressively from East to West. We extract the following notice of it from a lecture delivered by Mr. Ferguson in the Dublin Society House; "it had travelled through Spain, Portugal, France, Switzerland, Holland, Belgium, Bohemia, Hungary, and Prussia, previous to its making its appearance in England, which it seems it did on the western coast of that island, about two years ago. Every description of animal, living in a state of domestication, have been affected by the peculiar state of the atmosphere that has for some time past existed. Man, himself, has not escaped, and even poultry has been affected.—All cloven footed animals have evinced pretty nearly the same symptoms; the principal characteristics amongst this class of animals being an affection of the mouth, feet, and udder—the former having a number of vesicles or blisters formed in it, on the tongue and gums: the feet and udder being frequently affected in the same manner, although sometimes they are merely tumified." The learned gentleman then proceeds to prescribe a wash, which we will keep in case we are visited, as most likely we shall be, by this formidable disease. Inoculation, which has been practised to a considerable extent, and is recommended by Mr. Ferguson, is extremely deprecated by others.

WARTS ON COWS.

I had a cow that had a large bunch of warts grown under her udder, as large as the back of my hand, and it kept increasing. I made a strong decoction of alum and water, and washed the part two or three times a day: in a short time it was as clear as any part of the udder.—I likewise have had cows teats so covered with warts that it was difficult to milk them; by applying the above decoction to the teats after milking, morning and night, the warts soon dispersed.—*Bell's Messenger.*

HEALING WOUNDS IN TREES.

The branch is cut off at a distance of three or four feet from the tree, care being taken to support it in a manner to prevent it from splintering the stump. The bark of the stump is then cut into narrow longitudinal strips, which, after being carefully peeled off with a barking tool as far as the body of the tree, are tied back so as to keep them clear of the saw in the amputation of the stump close to the body of the tree. The saw-cut surface is then smoothed with a wide mortice chisel, and is covered with the strips of bark, cut and fitted to it as accurately as possible, and fastened down with brads driven into the depth of about one-eight of an inch.—The wound and surrounding parts are next covered to the depth of two or three inches with a cataplasm, according to the following receipt:—Clay, 4 parts; fresh cow dung 2 parts; finely sifted wooded ashes, 1 part; add cow's hair, such as that used by plasterers, a handful or more, according to the quantity of the composition required. Mix these materials together in a very regular manner, moistening them with water to bring the whole to a proper consistence. To preserve the cataplasm from injury, a stout canvass is passed over it and sewed round the body of the tree; both of which must remain six or eight months; their removal depends solely on the healed state of the bark. When the bark is healed, the part of the tree where the branch was amputated will appear as if no limb had grown there. The operation should not be performed in the winter months, for the bark will not run or separate from the wood, and the wounded part would be liable to be attacked by frost.—*Transactions of the Society of Arts.*

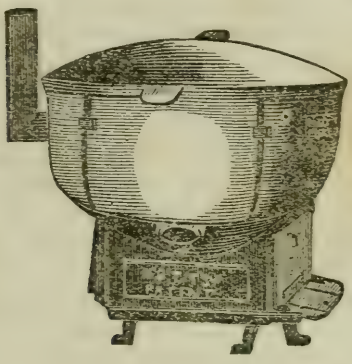
AMERICAN LABORERS.

The American laborer is most expert at the use of the axe and the scythe, but handles the spade most awkwardly, having no idea of banking, hedging, and many other operations common to English laborers. The versatility of his talent, however, renders him far superior to the British laborer in America, the latter having no chance with him in the use of the saw, the hammer and the trowel: it forms part of his ordinary business to build log-houses, mend ploughs,

wagons and harrows, and even kill and dress sheep and pigs.—*Bell's Weekly Messenger.*

It is this minute division of labor, which, while it renders the British husbandman unfit for the rough roll and tumble life of the woodsman of America, makes him so much more perfect in the particular branch in which he has been educated. To the fact, that there is a place for every man, and every man in his place, much of their superior husbandry is to be attributed.

MOTT'S AGRICULTURAL FURNACE.



It is very seldom that we have an opportunity of speaking of any agricultural invention with the unqualified approbation that we are enabled to bestow upon the utensil figured at the head of this article. It was constructed in consequence of a suggestion from the American Institute, that a simple, portable, and low priced furnace was much wanted by the farming community.

Mr. C. N. Bement, a distinguished agriculturist in New York, testifies to its superiority over every other contrivance that he could obtain for trial. The desideratum of applying the whole heat to the boiler is obtained completely by a very simple construction. No individual, who desires to obtain boiling water upon the most convenient and economical plan, should hesitate to procure one of these furnaces. They can be had in this city of Messrs. D. & C. R. Weller, for prices varying from $12 to $35, according to size; the largest holding about sixty gallons. We conclude our notice of this excellent invention with the following certificate, which is not a whit beyond the testimony of several other excellent farmers who have called on us to testify to its merits:

Messrs. D. & C. R. Weller:

Gentlemen,—We have given "Mott's Agricultural Furnace" a fair and impartial trial, and for boiling food for cattle or hogs, recommend it to the agricultural community, as decidedly the very best article of the sort we have ever seen for convenience, despatch, and economy in fuel. We are perfectly satisfied, that no farmer, having use for any thing of the sort, would, upon trial, be without one for double the cost. Such also is the universal opinion of every one with whom we have conversed, who has used them. In the language of one of much more experience than ourselves, "we cannot say too much for them."

Yours, A. B. Shelton.
John Poe.
Thos. J. White.

Nov. 1, 1841.

SEED POTATOES.

In the Chronicle I observed some remarks from Perth relative to the failure of the potato crops; and I have no doubt the failure has almost always been caused by keeping the seed in large quantities together, frequently before being perfectly ripened. I have for many years past, at the time of taking up, adopted the plan of laying upon the ground for some time, till they become green and hard, such potatoes as I intend for seed the following year, and keeping them by themselves during the winter. By this means I have never known any to fail when there has been a very general failure throughout the country; and I have noticed that a general failure has mostly followed a bad season for ripening the tubers the year before. I feel confident that if this mode of hardening the seed tubers were adopted, there would be no failure in potato crops, and the plants would come up much stronger and more healthy.

Gardeners' Chronicle.

Whilst on this subject we beg leave to detail the purport of a conversation held lately with a most observant and intelligent grower of Irish potatoes in this vicinity. He stated that, from sundry experiments, he was satisfied of the necessity of procuring his plantings every year from the north. In 1839 he purchased northern plantings, and never saw finer potatoes than they produced in 1840. He re-planted them in 1840, and finished out a few rows with more indifferent looking potatoes purchased from the north. Notwithstanding the purchased plantings were not apparently so good as those he raised himself, and although they were subjected to exactly

the same treatment, the product was infinitely superior. The fine potato of 1839, although very superior in 1840, had degenerated into an inferior article in 1841. Upon a visit to Massachusetts this fall, he was informed by a potato-grower of that State that the same necessity existed there of looking further east for their plantings. Every year he obtained them from Nova Scotia, and he found upon inquiry that even there the potato degenerated upon cultivation, and that they were compelled to resort to the seed every two or three years.

BRAN.

A writer in a British agricultural journal suggests that the bran of wheat should, from the stimulating salts it contains, form an excellent manure especially for wheat. He begs that it be tested at the rate of from three to six hundred weight to the acre. The experiment is worth trying in our milling region, where it is so abundant; particularly, as we are satisfied, that wherever its properties as a feed are fairly tested, it will certainly fall to a suitable price for manure.

To the Editor of the Southern Planter:

My Dear Sir,—I am a subscriber to several agricultural papers, because I think the meanest amongst them is worth ten times the amount of subscription. Yours is the only one I take south of the Potomac, and from the specimen you have afforded me of a southern production, I feel inclined to extend my list in our own section. Will you be good enough to assist me with your advice on this point?

Whilst I have my pen in hand I will take occasion to protest against the spirit of my northern periodicals upon the subject of the fair sex. Why sir, their gallantry, which freezes up during their long winters, has not time to thaw in summer. They are as cold as frogs. Here, woman is associated with all that is bright and charming. The great object of man is, by incessant labor, to make her life one unvarying scene of ease and pleasure. There, her name is never mentioned but in connection with work. Work, work, is their incessant cry. Our women do not *work* enough, is the burden of their song. I wonder the dear creatures do not make their escape from these cruel task masters, and fly to the arms of the gallant sons of the south. Why sir, the poorest man in Virginia would scorn to tax the gentler sex to contribute more than was agreeable to his support. He will tell you that he took his wife to his bosom, to cherish, protect, and support her, and that as a man, he does not shrink from the task. He will advise the females of his household to engage in the gentle occupations of their sex, for the sake of securing their own happiness, but never for the purpose of lightening the burden which nature has so properly devolved on his broader shoulder. We hope the day is far distant when the gallantry of a southerner will permit him to make those, whose happiness should be his only care, partakers in his toils and burdens.

Yours,

A Farmer, Husband, and Father.

Upon the first point of our correspondent's essay, we are most happy to respond to his inquiry. Although, where all are good it is invidious perhaps to distinguish any, we cannot forbear to call his attention, particularly, to the Western Farmer and Gardener, published by Mr. Affleck in Cincinnati; the Southern Agriculturist, published in Charleston. The Agriculturist, published in Nashville, Tennessee, we have heard of, but never seen. The Ploughboy is the title of a cheap periodical, that has lately appeared on our exchange table. Of course, he is familiar with the excellent work of our neighbor, Mr. Ruffin, which has done so much for Virginia, and the south. Indeed, as he intimates, he cannot go amiss. Although some are certainly worth much more than others, we will hazard the assertion, that there is no agricultural paper, published in America, that is not worth, to any farmer who will read it, ten times its cost. Of course we do not mean to recommend any one man to take all—the labor of *sifting* would be too great—that is rather the business of the editor, or editors, he may choose to employ.

On the second point, we are a little more chary of our opinion. It is a delicate subject. We certainly admire the gallantry of our correspondent, but we cannot consent to the proposition, that our friends of the north are wanting in this essential quality. Our system of agriculture and civil institutions differ in many respects, but we feel well assured that they entertain, in common with us, the most profound respect for the female character. Woman has undoubtedly her duties to perform in a certain sphere, and whilst we never wish to see her degraded to a productive drudge, yet her operations though quiet, are not unimportant, and if we do not greatly err in our correspondent, there are many of the products of female labor about his household, which it would be testing his gallantry pretty severely to deprive him of.

IRRIGATION.

Whether rain water is efficacious because of the ammonia with which it is charged, as supposed by Liebig, or by its action in dissolving this and other salts contained in the soil, as imagined by his predecessors, certain it is, that this element is absolutely necessary to vegetation, and also, that it is valuable in proportion to its impurity. Indeed the waters of running streams are rendered impure by the accessions, which continued washings are constantly affording of the richest portions of the soil. It is the part of wisdom in man to counteract the operations of nature, where those operations militate to his disadvantage. Hence, to force the river to give up this rich deposite may be done to great advantage, under certain circumstances. The circumstances, upon which the profit of irrigation will depend, are of course the nature of the locality, and the extent to which the particular stream happens to be charged with enriching properties. This varies much under different circumstances; below a city, the water is found to be much more fertilizing than above it, and there are many streams into which nature throws such boundless riches that they should be forced to disgorge them, if it be possible to accomplish it.

Irrigation is much practised in the East; where, to be sure, it is absolutely necessary to counteract the dryness of the climate. But even in Europe, it has been resorted to, it is said, at great expense, with wonderful advantage. We are sure that there are many situations in our country of hills and streams where this practice might be adopted with the greatest benefit. Wherever there is a waterfall, with a level below it, at a comparatively trifling expense the water may be lead into a canal above, from which it might, at pleasure, by means of gates, be permitted to flow upon the land below. This action, especially upon meadow lands, is said to be most astonishing; indeed, the immense expense that is sometimes incurred to obtain it in Europe, proves that *there*, at least, the natural advantages attending thousands of localities in this country would never be neglected. We will be more specific hereafter in a description of the work, and its effects, hoping that some of our readers, whose circumstances justify it, will be induced to encounter the expense of a trial of the system.

TEST OF SOILS.

One of the most valuable properties of soils, and one in which there is a wonderful difference, is their capacity for absorbing moisture. The extent of this capability may be easily tested with even a specimen of earth. Let the portion to be tested be thoroughly dried and weighed; then, after it has been subjected to the atmosphere, let it be weighed again. The difference will show its capacity for absorption. By making frequent use of such simple means, the practical farmer can easily render himself familiar with the relative capabilities of soils in this respect.

TURNIP FLY.

In the report of the Stoke Ferry Farmers' Club, it is stated that "the fly had been proved to abound most in wooded enclosures, and generally prevailed most near the hedge rows, thereby showing that in them they were bred and hatched. This circumstance it was which led the late Mr. Robert Paul to devise the plan of a decoy stetch; which, in fact, was nothing more than a border or head land round each side of a field, and which he recommended should be ploughed and sown with white turnips, a month or so before the main crop was sown. He always contended that the fly was more partial to white turnips in the broad leaf, than to a young Swede. As to any application of soot, lime, elder boughs or smoke of any kind, to the growing crop, it was considered utterly useless—a rapid growth was all in all, and this could obviously be best obtained by a clear, fine tilth, and high manuring."

SEEDS.

We some time since quoted an opinion from the Louisville Journal, that northern seeds would ripen earlier upon southern fields than seed raised in the same latitude. The editor therefore advised the importation of northern wheat for seed. It is certainly a great desideratum to obtain early maturity in this crop: a few days will often afford security both against fly and rust; but we are inclined to think that this effect is to be expected rather from *southern* than *northern* seed. Dr. Lindley says that plants, which for a course of years have been cultivated on a warm dry soil, will acquire habits of great excitability, which they will not readily part with even under circumstances very different as to soil and climate. The late Mr. Knight, too, used to say, that the crops of wheat on certain high cold ground he cultivated, ripened much earlier when

he obtained his corn seed from a warm district than when he employed the seed raised in the immediate neighborhood."

To the Editor of the Southern Planter:

Dear Sir:—This paper will be devoted to what I consider the best mode of treating the hog. And in the offset, I bespeak the patience of your readers, for to do any thing like justice to the subject, I must necessarily be somewhat particular.

We will suppose then that you have the proper accommodations for your hogs, such as have been described, or something similar to them; and that in addition to this, you have a boar of the *improved breed*, (the common hog, with but few, if any exceptions, is of very little value,) and that he has been kept constantly apart from your sows. This is a matter of great consequence for if he be unrestrained, he will either stray away, so that you will lose him, or he will have intercourse with the sows at improper periods of the year, or what is still worse, he will set them to breeding when they are too young for the purpose. And here I will remark, that the best time for the sows to have their pigs is about the first of March, or first of September, consequently the proper time for them to go to the boar is about the 10th of November or 10th of May, for it is well known that the usual time of gestation with this animal is just about sixteen weeks. We will suppose, further, that you have a likely well grown sow, ten or twelve months old, (younger than this will be too early) and that at one or the other periods indicated above, she manifests an inclination for the boar. She may now be indulged, and if she stands quietly during the whole operation, one coitus will ordinarily be found sufficient. Indeed, I consider *one* as preferable to a dozen or more. The boar is then to be returned to his pen, and the sow to be put in another, and there kept apart from all other hogs, until she is entirely out of heat. After this she may be turned out, and commonly requires no other attention, except that she be kept in good growing condition. A few days or even a week before the expiration of her term, she ought to be put up in a good sheltered pen, with a small quantity of short litter to make her bed with, and then my practice is to feed plentifully, not only with solid food, such as corn or meal, moistened with water, but with such succulent food as I can command at the time. This I find to be a certain preventative of that vile and unnatural propensity, which some sows have to devour their young. When treated in this manner, I have never known in any instance a sow to eat her pigs. The "after-birth" is always disposed of as nature prompts them—they eat it.

After farrowing, almost the only attention for the first two or three weeks is to the sow. The pigs during this time are dependent entirely upon her for their food. And here let me particularly impress it upon all breeders to be very sparing of food for several days after bringing forth. The creature now, as all other creatures in a similar condition, is in a feverish state, and a plentiful supply of food, especially of an exciting nature, would but increase the difficulty. Let her be kept on strictly a short allowance, until by her clamour and importunity, she manifests herself to be very hungry, and then you may gradually venture upon more plentiful supplies. After the first week, there is commonly no risk in giving her as much food as she will eat *quick* and with a good appetite. But by all means, avoid satiety, and upon the first indication of loathing the food, take the whole away, and let the next supply be proportionably moderate.

At from two to three weeks old, the pigs will commonly manifest a disposition to begin to eat. This ought by all means to be encouraged, for by it, you relieve the sow, and in addition to this promote the more rapid growth of the pigs. To effect this I have tried two plans; the first was to place food (sour milk mixed with meal is very good) on the outside of the pen, to which the pigs have access, by means of a hole made for that purpose; or, secondly, keep the pigs constantly shut up, and when you wish to feed them turn the sow out, for she will not let the pigs eat with her. The first plan I have tried, and found this objection to it, that the stronger pigs would drive away the weaker, and thus my purpose was in part frustrated. The latter I am now trying, and thus far, though a little more troublesome, I am pleased with it, but the experiment has not proceeded far enough for me to speak in confidence about it.

I ought to have remarked earlier, that if after farrowing, your young sow brought forth more than *five* pigs, the smaller and more feeble ought to be taken from her, so as to reduce them down to that number. Four or five thrifty and well grown pigs will be worth more at two months old, than ten poor meagre ones. And then again at weaning, which takes place at six or eight weeks old, if there be a poor and unpromising pig, (and this is often the case,) I mark him, and he is destined to leave the herd. To effect this, I have three resources, in one or the other of which I have always succeeded. The first is to sell him for what I can get, or if I fail in this, then to kill and eat him; or if he is too poor for this, then to *give* him away, and in the latter I have never yet failed. I have already remarked, that five pigs is the extreme number that ought to be left with a young sow. I will further remark, that no sow, however large, ought to have more than seven.

At the time of weaning, or even earlier, would be better, the males are castrated, and when this operation is performed very early, the wound

soon heals, and the pigs appear to suffer almost nothing from it. The sows with me are never spayed nor shotted. As a substitute for this very disagreeable and even barbarous process, I endeavor to make the pigs quite fat at as early an age as possible, and when I succeed in this, they very rarely show any inclination for the boar. If, however, this inclination should manifest itself, I indulge them about two months before the time of slaughtering; and I find that the young open sow treated in this way, makes just as good meat as the spayed sow or the barrow.

Weaning is effected by shutting up the pigs in their pen for about a week or ten days, in which time the sow's milk dries up, and there is commonly no more difficulty about it. The pigs ought now to be turned out, and suffered to go pretty well at large, for neither the pig, nor any other young animal, will thrive much in a state of constant confinement. This liberty is allowed them, until they become so large as to be mischievous; they are then confined closely to their pen, except that they are allowed the use of the lane belonging to the piggery, for occasional exercise. And this continues to be the case till they are sold or slaughtered.

I ought, perhaps, before concluding, to say something relative to the *diseases* of hogs. But really I have had so little experience on this subject, that I feel very great diffidence in entering upon it. Till recently, I never knew what it was to have any sickness among my hogs, but lately they have been visited with a very fatal malady. It is not my intention to give a description of this dreadful disease. They who are curious on this subject, will find it very accurately described in the last number of the Farmers' Register, page 554. This disease among my hogs, I consider as a judgment justly deserved for my carelessness. Sometime ago, I was in the habit of keeping ashes mixed with charcoal constantly in my hog pens, and as long as I did this, my hogs were perfectly free from disease. But for six months or more I have neglected it, and the consequence was, that this fatal disease made its appearance among them. After trying various remedies, all of which turned out ineffectual, I at last resorted to ashes and charcoal, and this is the only thing which has made the least impression upon it. My hogs are not yet well, but are evidently *convalescent*, as physicians say.

And now, sir, in summing up the whole, you will perceive that I lay great stress upon the following particulars:

A good thrifty breed of hogs, coming early to maturity.

Good and comfortable accommodations for them.

The number of hogs kept, graduated by the amount of food which you have for them, so that they may *always* have an abundance.

The number of pigs allowed to a sow, restricted so as never, under any circumstances, to exceed seven, and generally below it.

Getting rid, on some terms or other, of all unpromising pigs, so that none but the likely and thrifty are kept for store hogs.

Pushing the pigs when young, so as to get them fat *early*, and then it will not be difficult to keep them so.

"And last though not least," the food to be given at regular stated times.

If you can make up your mind to attend to all these particulars with steadiness and perseverance, you will have, or I greatly mistake, *success in rearing the hog*. And now wishing you and your readers all possible prosperity,

I am, &c. J. H. TURNER.

HESSIAN FLY.

We were struck by an observation made in our office, a few days since, by one of the best farmers and most extensive wheat growers in the state of Virginia. We showed him a sample of "fly proof wheat." "Why, says he, the Hessian fly is the chief source of my profit. By judicious management and high cultivation I keep clear of the fly, whilst the slovenly farming of my neighbors fosters it, and so keeps up the price of wheat. If the fly (laughingly) did not kill the wheat, it would be so plenty that it would hardly be worth raising. Seriously, if a good manager were to look to his own advantage only, he would dread the day when the much talked of remedy for the Hessian fly shall be discovered. As a patriot and philanthropist, he might rejoice that the great mass would be benefitted even at his own expense."

We are assured, from other sources, that this gentleman has, by a system of high cultivation, discovered the only remedy that, in our opinion, will ever be found for the Hessian fly. We shall address ourselves to his *philanthropy* and *patriotism* to make that system public; although we rather suspect that it involves too much industry and attention to be generally popular.

For the Southern Planter.

PRESERVATION OF TIMBER.

If we view a horizontal section of an exogenous tree, such as the stump of one of our forest trees sawed smoothly off, we find it presenting a regular arrangement of certain organs, viz. the pith in the centre, next to this, concentric layers of ligneous matter, exterior to these, the cortex or bark, and the medullary rays which pass from the centre to the circumference. During the first year of

the existence of a tree, the pith is humid, and presents a greenish hue, and performs an important rôle in transmitting the sap for the support of the first ligneous layer that is formed around it; as the tree grows, the pith dries, becomes white, and ceases to be important. With each year of the tree's existence a new ligneous layer is formed consisting essentially of woody fibres, and the *ensemble* of these ligneous layers constitutes what is commonly called *the wood* of timber trees; the most exterior of these layers are known as sap-wood, and is of a lighter color and is less solid and less durable than the heart-wood, which is found in the central portion of the tree. The sap-wood and the bark are the principal channels for the conduction of the fluids of a tree, and as the layers of which the sap-wood is composed grow older, they cease to act as channels, and the sap concretes in their cells and intercellular passages, and gradually gives them the dark color, and greater solidity, and weight of heart-wood. This is very visible in the pine tree, and is easily proved by maceration in proper acid, and even oak and lignum vitæ submitted to rough experiments lose their color and ponderosity, and display their fibrous frame as light as that of the willow.

Thus we see the reason of what observation and experience has taught us, with regard to the importance of selecting a tree with a sufficient portion of heart-wood, and the necessity of trimming off the sap-wood which contains the very elements of decay in the shape of the unconcreted fluids; and thus we may learn, the importance of cutting trees at those periods of the year when they contain the smallest quantity of fluids, which periods are mid-winter and mid-summer, whilst spring and autumn are to be avoided; as at these seasons great quantity of fluids are required either for the development of the buds of last year, or for the formation of buds to be developed the next year. Heart-wood may be kept under water, or in a dry place for hundreds of years without suffering any appreciable change; but when it is exposed to heat and moisture, or is alternately dry and wet, or when it is in juxta-position with putrefying matter under water, it undergoes decomposition; and since it is often necessary to use timber in situations where it is exposed to these causes, many efforts have been made, by various persons, to counteract their effects, but no one seems to have been so successful as Mr. Kyan. This gentleman was led to suppose from some of his experiments, that the decomposition of wood was dependant upon *albumen*, and knowing that animal matter was made durable by the combination of gelatine and tannin (as in manufacturing leather) he inferred that he could prevent the decay of vegetables by combining something with its albumen, and he selected for this purpose corrosive sublimate, which has fully answered his purpose—as wood placed in tanks and saturated with a solution of this substance, is rendered almost indestructable, as far as the usual causes of decay are concerned.

This fluid is absorbed by the vegetable tissue, in consequence of one of its properties (the chygroscopicité of the French) of absorbing fluids, as is exemplified by a dry tobacco leaf, coming *in order* as it is called, in damp weather, when the humid atmosphere comes in contact with it; which faculty exists even after the termination of vegetable life, as the case of the tobacco leaf proves, as well as the moist condition, that dead trees and stumps are found in, when they still preserve their erect position even. Mr. Caleb Cormalt's paper, copied in your last number, has induced me to offer you these remarks in confirmation of his views, and afforded me another opportunity of signing myself

A Naturalist.

The following is extracted from the Boston Cultivator. We know nothing of the character of the anonymous correspondent, and we are generally loth to even *quote* statements, the value of which depends upon the veracity of the relator, where there is no guarantee of character. Such communications are always invalidated by being anonymous.

In this instance, however, we are inclined to think, from our own experience, that the writer is, to a certain extent, worthy of credit. We have known peas, beans, and potatoes, under certain circumstances, planted in the fall with considerable success. We should be pleased if some of our market gardeners would make some experiments for us and report the result—their own judgment will guide them in the selection of vegetables. If the germinating principle is not injured by the winter frosts, they will certainly be obtained much earlier than they can be had by spring planting, and we have often noticed that, as a general principle, early crops are the best.

AUTUMNAL SOWING.

To the Editor of the Cultivator.

Much has been said and written of late by our agricultural brethren in favor of sowing the seeds of several species of vegetables in the fall, instead of deferring it, as has usually been the practice, until spring.

To this subject my attention was first directed by an article in the Farmers' Cabinet, and as the course of practice pointed out appeared to me at the time to be both important and feasible, I determined to "*give it a try.*" From that time, now several years since, I have been constantly en-

gaged in experimenting upon seeds of all the various descriptions usually sown in this climate that are in their nature sufficiently hardy to survive uninjured through the chills and frosts of winter. The conclusion to which these experiments have led, is, that the seeds of many of our garden vegetables, usually so denominated, invariably do much better, and yield far more abundantly when sown in the fall, and furthermore, that in all cases where the circumstances of soil, aspect, and vegetable stimuli are equal, the trouble and expense of cultivation, are far less under this system, than under the old.

Every observing farmer must have noticed that seeds, accidentally disseminated from seed stalks in autumn, and buried beneath the fine soil of the surface by the fortuitous agency of winds, rains, or frosts, or, indeed, by any other cause competent to such a result, are invariably developed some weeks sooner than those sown in the spring; and that the "*start*," which they are thus enabled to obtain, secures to the plants, not only a superior forwardness through all the subsequent periods of their growth, but not unfrequently a happy exemption, also, from the ravages of the innumerable hosts of insectiverous depredators, by which garden vegetables, in a less forward state, are so frequently destroyed.

There are some varieties, however, to which this rule will not apply, as they are too tender and fragile in their nature to endure the effects of the chilling blasts and frosts of the early spring. But the onion, as well as the carrot, beet, parsnip, and cabbage, and indeed several other kinds of valuable plants, are in no wise injured by these causes, and if favored with proper attention in the after culture, are almost certain to experience no detrimental effects therefrom. It has, however, been recommended by some *not to sow the seed in the fall*, as herein directed, but *to deposite it in bags or boxes in the earth*, and then sow in the spring.

But this can only be necessary where the grounds are infested by fowls, for as the sowing, if performed in autumn, will of course be postponed by every judicious and reflecting person, until the ground is just upon the point of "closing up," there will be but little if any danger of loss from any other causes. And besides, seed thus prepared is never so forward as that which is exposed to the full action of the earth the pericardium of seeds thus buried, during many months, having been found, upon examination, to be almost as firm and indurated in its texture, as when inhumed; whereas those seeds that have had the full benefit of the operations of frost and the elastic gases always germinate with the greatest rapidity and produce invariably much the most healthy plants.

More than two-thirds, perhaps three-quarters of the productions of the earth, from which man and beast derive sustenance and support, may be cultivated in this way. Many of the cereal grains, to wit, oats, wheat, barley, and rye, as well as potatoes, and indeed, all the numerous varieties of turnips, *have* been so cultivated, and can be again. The florist also may avail himself, to a certain extent and with equal advantage, of the same rule. It is a practice, in short, founded upon the immutable principles of science, and, what is still more confirmative of its "philosophy," and feasibility in practice; it is the system which nature herself pursues.

A Practical Farmer.

October 1, 1841.

M'CORMICK'S REAPING MACHINE.

Col. Edward Smith, of Rockingham, has called our attention to a reaping machine, advertised and described by Mr. C. H. M'Cormick in the Staunton Spectator. Col. Smith we know to be a sound, practical man, and understand that he is one of the best farmers in the agricultural county of Rockingham. He speaks in high terms of the machine after witnessing its operation in the last harvest. The machine is described as being extremely simple and durable, an easy draught for two horses, which with two hands, have cut readily twelve acres in eight and a half hours; saving, it is said, at least a bushel more of grain to the acre than can be effected by the best cradling. From the testimonials adduced to support the character of this machine, we are inclined to entertain a highly favorable opinion of its value. We should be extremely pleased to see Mr. M'Cormick and his reaper on this side of the mountains next season.

☞ The machine, we observe, is furnished at the, as it seems to us, extremely low price of $100, and warranted to perform as described.

TINKLER'S PLOUGHS.

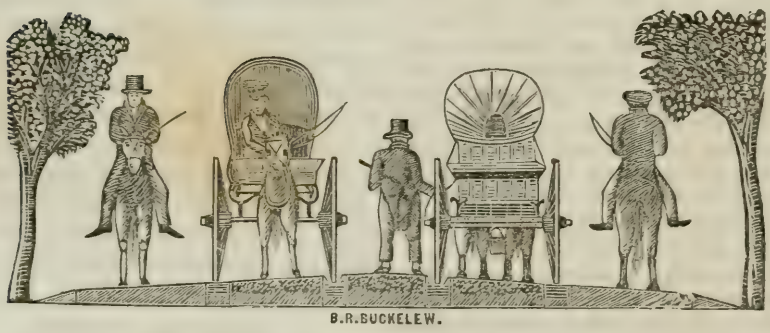
The Editor of the Enquirer concludes a notice of the "Planter," indited with his usual courtesy, with the following request:

"Will the Editor in his next be good enough to give a complete description of the Tinkler plough, its mode of operating, and the soil to which it is best adapted?"

The Tinkler plough was introduced into this region of country by the inventor in the month of March, 1841. It soon grew into great favor, and is in many respects the best plough we have ever seen. Its great excellence consists, we think, in the peculiar shape of the mould board, which it is impossible, either by word, or an en-

graving, to describe accurately. Attached to the point of his plough, Mr. Tinkler has a coulter of peculiar construction; it is of cast iron, sharp and thin, extending only seven or eight inches above the point; consequently, when the plough is in the ground, the upper point of the coulter appears just above the surface. Thus, by means of the wing and this coulter, the perpendicular and lateral cuts are made with two thin sharp instruments, whilst the long and taper wedge of the mould board raises and turns the slice in the most beautiful manner imaginable. This plough never chokes, and turns under weeds and clover in a manner much more perfect than we have seen effected by any other implement. Besides the peculiarities we have mentioned, in one form of Mr. Tinkler's plough, two mould boards are united at the heel, in such a manner, that whilst one sets upon the ground, the other is elevated at an angle of forty-five degrees. A common beam revolves upon the centre, so that when the ploughman arrives at the end of his furrow, he turns his beam, throws his other point upon the ground, and goes back down the same row. This of course makes a hill side, or right and left hand plough; but this plough Mr. Tinkler prefers for level land; contending, that the additional weight is not regarded by either horse or ploughman, and that much is gained by proceeding up and down, from one side of a field to another, without land or water furrows. It is true, that in this arrangement, one stocking answers for two ploughs, but we are inclined to doubt, whether this and the other advantage claimed by Mr. Tinkler for his rotary plough, are not more than counterbalanced by the complication, and some other disadvantages to which this particular form is subject. He has, however, testimonials from the best farmers, of its great superiority. For general purposes *we* should prefer the simpler form of his stationary plough.

TRACK ROAD.



B.R.BUCKELEW.

We present to our readers a view, taken from the Mechanics' Magazine, of Williams's track road. The inventor thus describes the nature and advantages of the plan he proposes:

"It becomes necessary to inquire in what way timber, which is so plenty, and appears to last well, can be disposed of to our advantage. My reflections upon this subject have brought me to believe that timber hewn flat and laid in ways or tracks lengthwise of the road, to bear the pressure of wheels, would insure the end desired. The method that I believe to be the best is to hew and lay four ways or tracks, two quite flat, say one foot on the face, and two furrowed or guttered so as to receive the near wheels of all wagons and carriages.

"These tracks ought to be laid about five feet apart from centre to centre. The gutter or furrow made to receive the near wheels of carriages should be about three inches deep, and say four inches flat in the bottom, the tops being six or seven inches open. This would receive the wheels of all or most wagons. The centre of this track, laid say five feet from the centre of its fellow track, which is a foot on the face, would give such a diversity of width, that while the near wheel is kept in the furrow, the off wheel would be on the other track, notwithstanding a small diversity in the width which exists between the wheels of different wagons.

"The two near tracks ought to be laid about four feet apart, from centre to centre, and gravelled or M'Adamized between them, for what I

shall call the driver's path. This path would accommodate footmen, horsemen, and teamsters, or, if thought best, a horseman's path may be constructed on each side of the outer or off tracks. Four feet for the driver's path, and five feet each for the horse paths, together with six inches on each side for the surplus width of the outer tracks, make a total width of fifteen feet from out to out of the two carriage ways; eight and a half feet on each side would be the width of summer road and ditch in a thirty-three feet graduation.

"In case a carriage of speed should overtake one of burthen, it will be easy for it to mount over the driver's path and run in the left hand track until an opportunity appears for it to resume its proper one: the driver's path being raised but three inches

"As to the lastingness of timber thus situated, I am of opinion it would be good. The earth or clay would completely envelope every stick its whole length, except the upper surface, by which its native juices would be completely extracted, particularly if the timber be large enough to cut through the heart."

This suggestion has been partially adopted; with what success we are not particularly informed. How economical and advantageous such a plan would be for common roads would depend somewhat upon the contiguity of timber, &c. We should be more afraid than the inventor seems to be of the wear and tear attendant upon the constant friction of wheels upon a much frequented road.

Whilst its value for general purposes may be somewhat problematical, there can be no doubt of its economy in many wet, low places, through which much hauling is to be done. We once laid such a track through a marsh upon which we hauled a large quantity of wood to great advantage.

Upon the Chickahominy, especially, there is much valuable timber that is accessible only through the low flats that surround it. Here it is only necessary to lay two tracks of flattened trees, spiking on them two pieces of three by four scantling, so that the width between the pieces shall be a little greater than the measurement of your wheels from out to out; thus the wheels are kept upon the solid track, and if it is level, one horse will pull a cord of wood with the greatest ease. If much hauling is to be done, it will be better to lay the rails upon a bank, ten feet wide, thrown up from ditches on each side. Indeed, where much hauling is to be done, as of marl, especially over rotten ground, we feel assured that this is the best and most economical road that can be devised.

We have no doubt, that upon such a road, the mud from the marshes and pocosins of the lower country might be hauled upon the upland, to great advantage.

CORN.

[Dr. Osborne has very kindly furnished us with the following letter, read before the Agricultural Society of Cumberland. We are not personally acquainted with Col. Isbell, but understand he is just the plain, practical, successful farmer, whose opinions are most valued where he is best known. We would be much obliged to the Colonel, if he would favor us with a more minute and particular description of his method of cultivating his corn crop. Does he not use the hoe at all? Does he find the product as great as where more labor is used, or is it only that the difference in product is not equal to the difference in labor? Are we right in supposing that he objects to a fall fallow, because he wants the spring sod, in its decay, to furnish food for the young corn? Answers to these enquiries, with any further suggestions to which they may give use, are respectfully requested.]

Willow Banks, Oct. 7th, 1841.

Dear Sir,—It was my wish to have joined your Agricultural Society to-morrow, but very pressing engagements will prevent my doing so; if however the subjoined statement of my mode of raising corn be considered worthy of the attention of the Society, it is at their service. The plan recently adopted by me, and differing so essentially from all others heretofore practised upon is conducted in the following manner: Fallow your land well—carefully turning under all turf, and do this in the spring if possible. Harrow with light harrows before you plant; have your rows 5 feet 3 inches wide, and 2 feet 3 inches in the step, lay off with small trowel hoe ploughs, not cutting more than 2 inches deep at the farthest, so as not to turn up the turf; plant early and cultivate quick with single straight tooth harrows, seven teeth in each, the frame in the form of Y; timber 3 inches square, iron teeth 1 1-4 inches square, and about 8 inches long. Harrow about four times, and lay by your crop in June. If this method be practicable, and I have found it so, its advantages will present themselves so apparently as to need no specification.

Respectfully yours, &c.

JAMES ISBELL.

To Dr. N. M. Osborne, Stony Point Mills, Cumberland, Va.

AGRICULTURAL EXHIBITION.

The second exhibition of the Henrico Agricultural Society came off on the 21st and 22nd of October, in the city of Richmond, with great eclat. Our narrow limits forbid the extended notice of this meeting which our interest in it would induce, and which its importance demands. It is enough to know that the institution has realized the expectations of its most sanguine friends. Its funds are ample, the exhibitions interesting, attendance numerous, and interest unabating. The first day the Society and company met at Bacon's quarter. Here the mere looker on found less to interest him than usual; the exhibition of stock was indifferent; indeed, none was to be expected—the fall meeting is for a different purpose—no premiums were offered on any stock except one for the best stallion for farming purposes: this was unanimously awarded to a very fine, active, muscular bay of Gen. Carrington's, by the imported Cleveland out of a Roanoke mare. The Virginia cross has certainly improved the stock, reducing the beef, and condensing the bone and muscle of the sire.

If the sight seeker left the ground disappointed in the exhibition of stock, not so the real farmer. In the report of the several committees, especially that upon farms, he enjoyed a treat of the richest character. We wish we had room for this excellent report—it is worthy of the source from which it emanated. With great discrimination and judgment, the hardy laborer, who, with his own hand alone, drew from the earth a comfortable subsistence for himself and family, was selected as the object of the society's second premium. This committee exhibited not less of taste than discretion in this seeking for examples of skill and thrift in the abodes of humble industry. We must be permitted to quote the following extract from the conclusion of this excellent report:

"We observed in the course of our examination of several farms upon which we have not reported many evidences of great industry, directed without judgment or skill, and in a great degree neutralized, by reason of total ignorance of agricultural improvements and the application of labor. Still the spirit of industry is there, and some have caught the spirit of improvement too; are becoming sensible of the necessity for improving their houses and enriching their lands; but are uninformed as to the best means within their own reach of effecting that object.

It must seem incredible to those who have not witnessed it, that a man with a wife, and eight, nine, or ten children to provide for, and who, for that end, taxes his physical powers to the utmost, from the beginning to the end of the year, should yet be, or appear by his practice to be insensible to the inconvenience, discomfort, and risk of living in a house which has probably been occupied by several generations, without r epai, and which, with every thing around it, is in the most neglected and dilapidated condition. Yet such is the fact, and, in many instances, with industrious, respectable, and meritorious men, who, it would seem, have no conception of the importance, and the economy too, of first attending to the security and comfort of themselves, and of every thing around them.

It is not necessary for us to offer a remark upon this mistaken and destructive policy—we hope to see the influence of the Society applying the remedy, wherever there is industry and intelligence for it to act upon.

In conclusion, we are happy to have it in our power to report that, in the course of our examinations, we had the satisfaction of noticing a more general spirit of Agricultural improvement than we were aware of. There is a fine field for the operations of the Society, and every encouragement to perseverance in the cause. But there is much to do, and we believe one of the great principles of success is to be found in the encouragement of a class of cultivators, who, heretofore, seem to have been entirely overlooked. It is the men who guide their own ploughs, drive their own produce to market, and in times of danger, shoulder their muskets and take the field.

A distinguished prose writer of our own country, satirically remarked of the people of a great commercial city of the North—that there, "the Lawyer looks down upon the Merchant, the Merchant upon the Grocer, the Grocer upon the Green Grocer, and the Green Grocer upon the Apple woman—who don't care a straw about any of them. We trust it is not so among us—but these sturdy citizens of ours who have as much sterling merit and independence of character as any men on earth, who regard with indifference or contempt the trappings of wealth and station, and ask no favor but of the Almighty—have been left to drudge on, generation after generation, without an effort to improve or to aid their agricultural labors. They do not want industry, but they want the lights of agricultural science and improvement, which the necessity for constant toil and their own limited resources, places beyond *their* reach, but which could so easily be imparted to them by those who are favored with knowledge, leisure and wealth.

These, and other considerations which address themselves forcibly to the patriotism and liberali-

ty of our more favored people, this Committee would, if in their power, most earnestly endeavor to impress upon the wealth and intelligence of our old mother Virginia, throughout her extended borders. Give our people the lights of practical knowledge, improve our system of education, our agriculture and our mechanic arts, and the Old Dominion will once more be in the ascendant.

Respectfully submitted on behalf of the Farm Committee.

Wm. H. Richardson, *Chm'n.*

October 20, 1841."

After the distribution of the premiums, the Society adjourned to the meadow to witness a ploughing exhibition. We saw here some highly finished and good looking ploughs, manufactured by the celebrated Prouty & Mears, exhibited by Mr. Howard; also some equally in appearance, exhibited by Messrs. Gretter & Peake, from the factory of Ruggles, Nourse & Mason. Mr. Tinkler was also on the ground with his celebrated plough, and Mr. Palmer appeared with his, that is too well known hereabouts, at least to need any further proof of its merits. But the ploughing match was absolutely nothing. There was no dynamometer to measure the draught, and the work was done upon a clear sod, over a light sub-soil, where any plough would do pretty work—consequently it all looked well, but it afforded no real test of the respective merits of the implements. One thing though we took great pleasure in noticing, the skill exhibited by one of the ploughmen; this was a negro man in the employment of Mr. Goddin; his furrows were as straight as an arrow, and his judgment in managing his team and his plough entitled him to a premium—he is worthy of this notice at least. We should like to see Hicks matched against any plough man, black or white, north or south. We think they would have to confess, "Old Virginia is hard to beat."

The second day the exhibition of domestic manufactures excited great interest; every body argued from the first display the most brillant success in this department. We were lost in the mazes of counterpanes, comforts, and wollen stockings; but when we came to the department of the mechanic arts, we were a little more at home. The display of agricultural and other implements from the workshop of Mr. John Hitchcock would have done honor to *Niblo's* itself. Our farmers were delighted to find that they could be supplied with such implements by our own citizens, and many were proud to carry home these beautiful specimens of domestic manufacture. But what pleased us most of all, was the specimens of superb workmanship, in the shape of grates furnished by Mr. Samuel Denoon, entirely the product of negroes in his employment. Here was a practical refutation of the doctrine, that negro labor is unfitted for the best systems of agriculture; that they cannot be taught the arts necessary to a perfect system of husbandry: let such cavillers and unbelievers exercise the same patient industry in teaching their operatives, that Mr. Denoon h s bestowed on his, and they will find that the class that can produce such beautiful specimens of iron work, are capable of learning any of the more simple arts of husbandry.

This article is already much longer than our wont, and we are compelled, for want of room, to omit much that is worthy of notice. We say to our readers, come next spring and judge for yourselves. The agricultural spirit that will be excited, will be worth more than ten times the cost of the trip. We see and feel that the originators of this Society, by the example they have set, by the energy and zeal that they manifest, are doing more for agriculture and human improvement, than the whole race of politicians for the last twenty years.

CORN.

[We would call the attention of corn growers to the variety cultivated by Mr. I. H. Goddin in this neighborhood, and so highly recommended by the Farm Committee of the Henrico Agricultural Society. Specimens may be seen in the windows of Mr. Howard's agricultural store, where the seeds may be obtained—price $5 00 a barrel.]

GRASSES.

[A valued friend called on us a day or two since with two specimens of grass, which he thought might prove interesting to the agricultural public. The first was obtained from the farm of Capt. Meriwether, in Albemarle, who esteems it very highly; he considers it very superior as a hay to either herds grass or timothy. It grows very luxuriantly, and seems admirably adapted to the soil and climate of Albemarle. For farther particulars he referred us to Capt. Meriwether, himself; from whom we should be much pleased to hear upon this or any other subject. The specimen is preserved at our office, and is worthy the inspection of the curious.

The other specimen made its appearance in

the garden of our visitant two or three years ago, and grows very luxuriantly. Its appearance is singular, and we should be very far from indulging any very sanguine expectations of its value as a hay.]

AGRICULTURAL IMPROVEMENT.

We have been highly gratified in noticing the march of agricultural improvement, as evidenced by the increase in our good city of establishments to supply the wants of the farmer. Mr. Palmer, whose old stand has been long and favorably known to the public, has brushed up and enlarged *prodigiously*. Messrs. Gretter & Peake have united with their grocery establishment a large assortment of agricultural implements, and our friend Mr. E. C. Howard has lately opened, at the corner above the Banks, a select assortment of seeds and implements. These with our own small collection, to say nothing of the manufacturing establishments of Messrs. Parker & Spencer, afford facilities to the Virginia farmer, which should render it unnecessary for him to go out of his native state to supply all of his professional wants at least.

Much of this agricultural spirit hereabouts has been the offspring of the Henrico Agricultural Society. We sincerely hope, that the same means generally adopted, will extend it from one end of the state to the other.

THE ADDRESS.

Mr. Turner delighted a large audience with the short and pithy address, delivered before the Henrico Agricultural Society on the second day of its exhibition. The Parson's genuine humor and polished wit, render him eminently fitted for the delivery of a popular address. It is seldom that his hearers fail to be instructed by his sound reasoning and amused with his lively pleasantry. Amongst his other conceits, he maintained that Eden was a farm instead of a garden, and consequently that Adam was a farmer, and that his great success was attributable to the smallness of his farm, and the goodness of the *farmer's wife*.

MISCELLANY.

THE FARMER.

BY WILLIAM HOWITT.

There is no class of men, if times are but tolerably good, that enjoy themselves so highly as farmers. They are little kings. Their concerns are not huddled into a corner as those of a town tradesman are. In town, many a man who turns thousands of pounds per week, is hemmed in close by buildings, and cuts no figure at all. A narrow shop, a contracted warehouse, without an inch of room besides to turn him in, on any hand; without a yard, stable, or an outhouse of any description; perhaps hoisted aloft, up three or four pair of dirty stairs, is all the room that the wealthy tradesman can often bless himself with: and then, day after day, month after month, year after year, he is to be found, like a bat in a hole of a wall, or a toad in the heart of a stone, or of an oak tree. Spring and summer, and autumn, go round: sunshine and flowers spread over the world; the sweetest breezes blow, the sweetest waters murmur along the vales, but they are all lost upon him; he is the doleful prisoner of Mammon, and so he lives and dies. The farmer would not take the wealth of the world on such terms. His concerns, however small, spread themselves out in a pleasant amplitude, both to his eye and heart. His house stands in its own stately solitude; his outhouses stand round extensively, without any stubborn and limiting contraction; his acres stretch over hill and dale; there his flocks and herds are feeding; there his laborers are toiling—he is king and sole commander there. He lives amongst the purest air and the most delicious quiet. * * Ample old fashioned kitchens, with their chimney corners of the true projecting-beamed and seated construction, still remaining; blazing fires in winter, shining on suspended hams and flitches, guns supported on hooks above, dogs basking on the hearth below; cool, shady parlors in summer, with open windows, and odors from garden and shrubbery blowing in; gardens wet with purest dews, and humming at noontide with bees; and green fields and verdurous trees, or deep woodlands lying all round, where a hundred rejoicing voices of birds or other creatures are heard, and winds blow to and fro, full of health and life-enjoyment. How enviable do such places seem to the fretted spirits of towns, who are compelled not only to bear their burthen of cares, but to enter daily into the public strife against selfish evil and ever-spreading corruption. When one calls to mind the simple abundance of farm-houses, their rich cream and milk, unadulterated butter, and bread grown upon their own lands, sweet as that which Christ broke, and blessed as he gave to his disciples; their fruits ripe and fresh plucked from the sunny wall, or the garden bed, or the pleasant old orchard; when one casts one's eye upon, or calls to one's memory the aspect of these houses, many of them so antiquely picturesque, or so bright looking and comfortable, in deep retired valleys, by beautiful streams, or amongst fragrant woodlands, one cannot help saying with King James of Scotland, when he met Johnny Armstrong:—"What want these men that a king should have?"

HANGING JUDGE.

Counseller Grady, on a trial in Ireland, said, he recollected to have heard of a relentless Judge; he was known by the name of the Hanging Judge, and was never seen to shed a

tear but once, and that was during the representation of *The Beggar's Opera*, when Macbeth got a *reprieve!*

It was the same Judge, we believe, between whom and Mr. Curran, the following pass of wit once took place at table. "Pray, Mr. Curran," said the Judge, "is that hung beef beside you? If it is, I will try it." "If *you* try it, my lord," replied Mr. Curran, "it is sure to be hung."

TO THE READER.

We once again present ourselves before our readers in our individual capacity. This is the tenth No. of our little work: for the sake of closing with the year we shall publish the two last numbers together in the ensuing month, and taking time by the forelock, we will beg those of our friends who are satisfied with our endeavors to please them, to renew their subscriptions at once. We should like to form some idea by the first of January, as to what number of copies it will be advisable for us to print for the coming year. To the patrons of the present Volume we return our sincere thanks. We started the Planter without a subscriber in the world, satisfied that if we did our part, the public would do theirs. We formed no sanguine anticipations of the first year's success. We knew how natural it was for the public, in such a case, to require one year of probation at least. We offered the income to the printer, if he would bear the expense, but he was not *soft* enough to accept the proposition. We commenced with an edition of twelve hundred, which we have increased to three thousand. Notwithstanding all the embarrassments of a beginning, we shall clear *two hundred dollars* for our year's labor. Let not the reader smile at our triumphant boast. The pioneer in such an undertaking will assure him that this is to be reckoned the most distinguished success, and we are highly gratified at the result.

But although this is doing remarkably well for the first year, it would not answer quite so well for the second. We have endeavored to do our part. We have been gratified with the most substantial and flattering testimonials that the public were satisfied. We will promise that the Planter shall not deteriorate; indeed, it will go hard, if increased experience should not better its condition. Without meaning to arrogate any thing to ourselves, except untiring industry, and the most zealous devotion to the cause in which we are embarked, we think we can undertake, if our subscription list shall justify it, to furnish a paper not surpassed by any in this Union, if we can afford to go abroad and visit the best farmers in Virginia, witness their system of management, learn their modes of cultivation, gather and compare their opinions, we do not doubt we could collect a fund of information, that would render the columns of the Planter equal to any paper published in America. But this plan requires an abandonment of all other pursuits, and an entire reliance upon our paper. Of course it requires a great increase of our subscription list: will our friends, who concur with us in the value of such a course, help us to that increase? Let each man bestir himself in his own neighborhood. If every subscriber would only add another to his name, we should be satisfied.

Depend upon it a reliance upon communications will not do. Those who are best able to afford information have often least inclination to write. In the words of a friend who called on us a few days since, it frequently happens that those who *write most, plough least.* We have sought communications, in vain, from some of the most enlightened farmers in the state; they will *tell* you any thing but they will *write* nothing. Indeed to collect and condense is the labor for which the Editor is paid, and it is a burden that he too frequently devolves upon his correspondents.

In conclusion, we say, that if the public will make it an object for us to devote our sole attention to the "Planter," we will endeavor to make it worthy of their patronage.

Of course, the twelve numbers are all that will be sent without the remission of another dollar. We open a new list for the second volume, and no name will be enrolled without an advance of the subscription. Obvious necessity justifies a strict adherence to this rule.

We would beg our friends to remember in transmitting their subscriptions, that any Post Master will frank the letter, and thereby save the postage to both of us.

We are happy to announce that we have received another article from Mr. Morris on the curing of Tobacco, which we are obliged to defer to our next, for want of an engraving which will accompany it.

We hope that the length of our opening article will not induce the fear that we are relaxing in our labors, or that we mean to treat our readers to long and tedious essays. We copied Dr. Darlington's treatise, not to be read, but to be referred to. Its value constitutes the best apology for its insertion.

Richmond Markets, November 15, 1841.

Butter—Mountain butter, wholesale, 12 1-2 a 16 cts. for firkin; 20 cts. for roll.

Cattle Market—Cattle on the hoof, $5 a $7 per hundred pounds, according to quality; Rough Fat, 5 a 7 cts. per lb. Mutton, $3 a $6, according to quality.

Fish—Mackerel, No. 3, $7. Herrings, No. 1, N. C., $3 50; No. 2, $3; Potomac cut, $3 25. Shad, $8 50 per bbl.

Flour—Receipts are still small—sales at $6. City Mills is held at $7 50.

Grain—Wheat, $1 20 a $1 25 for red and white of the better qualities. Corn—sales at 65 cts. per bushel. Oats—much wanted, and good parcels would bring 45 cts.

Hides—Green, 5 cts. per lb.; Spanish, 15 a 16.

Iron—Pig, $25 to $35; Swedes, $100 per ton; English, 85 to 90; Tredegar, (Richmond manufactory,) 90; Up Country bar, 75 a 80.

Lumber—Clear white pine, $36; refuse clear, 32; merchantable, 22; refuse last sale at 14; flooring 15 a 25 per M.

Lime—$1, and dull—none now afloat.

Meal—70 cts. per bushel.

Provisions—Bacon—Smithfield, 7 a 7 1-2, hog round; Western sides, 4 1-2 a 5 1-2; shoulders 2 a 4 cents. Lard—7 1-2 a 8. Stock of Bacon and Lard good, and demand falling off.

Plaster—Last sales at $3 25 at Rocketts.

Sugars—New Orleans, 7 a 8 1-2, sales; Porto Rico, 7 1-2 a 9; St. Croix, 9 a 11.

Salt—$2 per sack.

Soap—For brown, 4 a 6 cts. per lb.; white and variegated, 12 a 14.

Steel—American blistered, $135 to 140 per ton.

Shot—6 cents, wholesale.

Tobacco—But little doing at our inspections. The new crop begins to appear in loose state—sales of such range from $1 to $5 25; general sales 3 a 3 75 and 4.

Teas—Imperial and Gunpowder, 80 cts. a $1 05 per lb.; Black 45 a 60 cts.

Whiskey—Very dull, and prices unsettled. We quote hhds. 25 cts.; bbls. 26 cts.

FREIGHTS.

Foreign—Rates to London, 35s. and to Liverpool, 30s. Continent, 30s. a 32s. 6d.

New York—Flour, per bbl. 25 cts.—very little going. Coal, 6 1-2 cts. per bushel. Tobacco, $2 50 per hhd., boxes 20 cts., kegs 25 cts.

Philadelphia—Flour, none going. Tobacco, $2 50 per hhd., 20 cts. for boxes, 25 for kegs—none going. Coal, 7 cts. per bushel, Richmond measure.

On the Canal—To Lynchburg and intermediate places, 10 cts. per 100 lbs.

EXCHANGE.

Foreign—On London, 14 1-2 per cent prem.

Domestic—New York Checks, 4 1-2 premium.

Philadelphia, 1 1-4 a 1 1-2 prem.

Baltimore, 2 a 2 1-2 prem.

North Carolina Bank Notes par.

Do. do. do. under $10, 2 1-2 dis.

South Carolina, par a 2 prem.

Savannah, 2 discount.

Augusta, par a 1 discount.

Alabama, 6 discount.

Tennessee, 9 discount.

Specie, 3 a 4 prem.

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THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.* | Tillage and Pasturage are the two breasts of the State. *Sully.*

C. T. BOTTS, Editor. **Opposite Merchants' Coffee House, Main Street.**

VOL. I. RICHMOND, DECEMBER, 1841. Nos. 11 & 12.

WHEAT.

What is the cause of the universal failure, of late years, in this great staple of Virginia? This is a most important question to the southern farmer, and we have been very sedulously endeavoring to obtain a satisfactory response to the inquiry. Is this important product to be abandoned in Virginia? Are our great manufacturing mills, the source of so much wealth, to go down? Is our unrivalled reputation in the flour market to be lost; or are our farmers to continue the cultivation of this crop only to see their hopes blasted, just at the moment they expect them to be realized? We sincerely hope that we shall not be compelled to choose between two such terrible alternatives. We know no substitute for the wheat crop in Virginia. It was formerly the great source of wealth to our farmers: now it must yield to tobacco, and even, we believe, to corn and oats. Much of our red clays is unsuited to the growth of these products, whilst they are peculiarly adapted to wheat and clover. How would we gladden the hearts of the proprietors of such soils, if we could point out the means by which the wheat crop could be freed from the precariousness and uncertainty which have attended it of late.

Many facts that we have gathered have brought our minds to the conclusion that all the evil influences operating on this valuable crop may be dispelled by a little management and a superior mode of cultivation. We believe that less attention has been paid to the cultivation of this crop than any other known in Virginia; the great reason for which is, that, heretofore, it has not been needed. But of late years a change has taken place either in our soil or climate, that requires to be counteracted by a corresponding action on the part of the grower.

In the first place, we have ascertained by repeated inquiries, that the best farmers, those whose fields are most nicely prepared and in the highest state of cultivation, invariably suffer least. In the next place, we are satisfied that by far the greater part of the injury to this crop is sustained within a few days of its maturity, and that the earliest crops are universally the best. Indeed we were informed by a very intelligent and observant miller, with whom we sought an interview on this subject, that he had remarked, that the failure had been concomitant with the abandonment of the early varieties. Is it not a fact that thousands of bushels are annually destroyed by rust, induced, as we have every reason to believe, by a state of atmosphere peculiar to our present harvest season? Would not thousands of bushels have been saved, not only last year, but the year before that, and the year before that, if the wheat could have been reaped a fortnight earlier than it was? How many days difference will richer ground and superior order make in the growth of the wheat? Will not this alone take it out of the jaws of its devouring enemy?

But some experiments lately made by Mr. Hannam in England, which are most minutely reported in the Quarterly Journal of Agriculture, go to prove, that wheat can be reaped to the greatest advantage a fortnight before it is ripe. These experiments were made, it is true, upon a very small scale, and such are not always to be relied on, but they seem to have been conducted with great care and impartiality, and have been confirmed by subsequent statements made in the agricultural papers both of Europe and America. Indeed, we have conversed with several of our own most distinguished millers and farmers, who are satisfied of the correctness of Mr. Hannam's conclusions. The experiments made by this gentleman were upon the same crop in three stages. First he cut a portion of it *green;* a fortnight after he cut another portion of it in what he calls its *raw* state; and lastly, he cut another portion a fortnight after that, when it was *ripe.* He found the raw to excel the ripe and green, both in measure, weight, and value in the market. The green was inferior to the other two, except in the nutritious matter of the

straw, in which it excelled the raw, which was again superior to the ripe.

Mr. Hannam thus describes the appearance presented by the wheat in its *raw* state:

"The straw, though appearing at a distance green, when examined closely, was of a hue fast approximating to yellow; while, for about a foot upwards from the ground, it was quite yellow."

By the term *ripe*, he says, "I don't mean that degree of ripeness when the straw breaks, the ears curl, and the grain shakes out, but that condition in which it is customary to commence reaping it—when the straw from the roots to the ear is uniformly yellow and has lost all symptoms of vivid health."

If then it is not only practicable, but desirable to cut the wheat crop a fortnight earlier that it is generally secured, is not this a circumstance of which we may avail ourselves, to the infinite diminution of the ravages of the fly and rust?

It must be confessed that our wheat crops suffer much sometimes from being winter killed; now whilst we think, that higher cultivation will, by strengthening the root, in a great measure, remedy this evil, we believe that *spewing* by which it is caused may be almost wholly prevented by a thorough system of under-draining.

So that we say to the wheat growers of Virginia, be not dismayed at your repeated failures. Do not dream of abandoning this great staple to which your soil, your habits, and education, are adapted. Let your difficulties only inspire you with a determination to overcome them by increased attention and energy. We believe you have them all in your power, and may subdue them to your will.

For the Southern Planter.

Mr. Editor,—For the last twenty-six years I have cut down my corn on the first day of September, and may almost say I have never had a heated or moulded ear. The consequence has been, that I have never been compelled to invade my springing wheat with cart-ruts, every one of which the winter rains would have converted into a gulley. There is no doubt you will say about the advantages of getting off your corn crop before you commence sowing, but how do you prevent your corn from spoiling? Simply, I answer, by putting it up in long, *narrow* pens through which the air can penetrate. Make your pens as long and as high as you please, but never let them be more than three feet through. I generally use fence rails for the sides, and pieces of old rails for the ends. By this means no ear of corn can be more than eighteen inches from the air, and by this means, I repeat, any tolerably forward corn may be penned on the first of September and preserved perfectly sound. This little secret is worth to those who did not know it before ten times the cost of your subscription. The pens should, of course, be protected by a sloping roof of plank, raised twelve or eighteen inches above the corn.

Your friend, W. N.

Louisa, Nov. 3, 1841.

The above is an important statement, reasonable in itself, and vouched for by one of the most respectable gentlemen in Louisa; his name is at the disposal of private inquirers.

To the Editor of the Southern Planter:

My Dear Sir,—As you request communications upon the subject of household recipes and domestic economy, I take the liberty of informing you that I have been for several years substituting the flowers of the well known weed, called *life everlasting*, for hops. Five or six years ago I was travelling through the county of Amelia, and observed an old negro woman in a field by the way-side very busily employed in gathering these flowers. To my inquiries concerning the use to which they would be applied, she told me that her mistress used them instead of hops in making yeast. I laughed, and thought people must be put to it indeed when they gathered such weeds to make bread of. As I approached home I happened to observe a large field full of the life everlasting; I gathered a quantity of the flowers, and carrying them home, related the circumstance to my wife; she tried them and from that day to this I have never bought a pound of hops. These are in no respect inferior, and I have never seen more beautiful bread than that made up with the yeast of these flowers. Every year we send out and gather a bag of them, which is hung up and keeps as well as a bag of hops. Hoping this communication may be the means of saving some expense and a little trouble to many of your numerous readers, I remain,

Your obedient servant,

JOHN TURPIN.

Manchester.

For the Southern Planter.

MANGE.

I see, Mr. Editor, that you recommend on the authority of Mr. Goode, arsenic for mange. I have kept a large pack of hounds, and been much troubled with this disease. I have tried the arsenic and turpentine as recommended by Mr. Goode. It is good, but a little dangerous.

I dislike to keep poisons about the house. I have found the following simple remedy more efficacious:—Mix pounded sulphur with common lard, and let the dog eat as much as he pleases, then annoint him well down the middle of his back and behind his ears with the balance. Persisted in two or three times this will certainly effect a cure.

Yours, J. P. C.

For the Southern Planter.

Mr. Botts,—Though not a practical farmer, I feel a deep interest in the prosperity of our agriculturists, and most heartily rejoice that the attention of the judicious and reflecting is steadily withdrawing from the wild and visionary schemes and speculations which have lately swept, like a pestilence, over our land, and is centreing on this branch of labor, now confessedly the most important to the best interests of our state. I do not flatter when I say, that I think your valuable and cheap paper better calculated to produce practical and lasting benefit to our farmers, than any I have ever seen. If you can accomplish the plan which you have so oftened pressed upon the attention of your agricultural readers, by inducing them to contribute, under the sanction of their own names, their several experiences, in every matter relating to farming, you will accumulate a mass of information, which must have a most important and beneficial effect on this great interest.

You will think it strange, after such a preface, that I should depart from the plan so highly commended; but being no farmer, as I above remarked, and having no experience to communicate, my name could answer no good purpose, and might prevent the subject I intend to allude to, from receiving the attention it merits.

It seems that the smut in wheat is becoming an engrossing topic among the wheat growers, and any information calculated to throw light on the subject, would receive attention. I do not mean to propose a remedy for this evil, or to discuss the relative merits of those proposed—but merely to say to my agricultural friends, that they have taken this entangled skein by the wrong end, and I fear they will have much trouble in unwinding it. A judicious physician will never prescribe for a disease unless he knows, or believes he knows, its *true* character, nor will he advise a course of preventives unless he knows the *cause* which generates the disease. Let the wheat growers apply this principle and they may hope for success—scarcely otherwise. The following questions may lead some of your readers to institute experiments, by which the desired information may e obtained.

1. What is the character of the disease in wheat called the smut?

2. What are the causes which produce it? Are they atmospheric? or are they derived from the soil?

3. If atmospheric, what are the conditions of the weather which are productive of the evil?

4. If from the soil, what are its peculiarities?

5. If healthy and unhealthy seed are sown together, is the disease communicable by the diseased to the healthy seed, and does it manifest any effect on the plant before the head forms?

6. Does the soaking the seed in the various solutions proposed accomplish any other object than the separation of the healthy from the unhealthy seed? and would not plain water have the same effect?

7—and lastly. Do these several solutions proposed for soaking the seed give any virtue to the seed itself? or do they impart any property or any material to the soil, which being taken into the plant, protect it from deleterious influences, whether derived from the atmosphere or the soil? and would not the application of the remedy to the soil have the same good effect?

These inquiries deserve the attention of our farmers, and a few experiments judiciously conducted, might lead to a satisfactory solution of many of the difficulties which now surround the subject. B.

ASPARAGUS.

It will be remembered, by those in this vicinity at least, that Gen. Richardson obtained a premium from the Henrico Agricultural Society, for the extraordinary asparagus exhibited by him at their fair last spring. Since that time, we have been requested, more than once, to obtain for publication the General's mode of cultivating this delicious vegetable. With this request we have complied in the article below, which was furnished by the General with that readiness which he always displays to advance the interests of agriculture.

Dear Sir: I give you, not as you have requested, "directions for cultivating asparagus," but a briefly as I can, the manner of cultivating mine; premising that so far as I know, there is no skill or mystery involved in the matter.

The roots (then two years old) were purchased of Mr. John Carter—planted in the month of March, in trenches 1 foot deep, 12 inches wide and 5 feet apart—the crowns of the roots when set in the bottoms of the trenches, so that the lateral roots interlocked, being about 12 inches from crown to crown. Previous to planting, stable manure was spread over the bottom of the trenches, an inch or two deep, the roots were

then set and covered with about as much earth, well pulverized, and the whole surface kept free from grass and weeds through the year. These were the directions given me by Mr. Carter. By the end of the first year, the trenches were filled up by the ordinary process of weeding, to within 2 or 3 inches of the surface; I cut off the tops, filled the trenches to the surface with stable manure, and very early in the spring drew up the earth so as to form a ridge over each row of roots—the produce was more than sufficient for my family. We cut none after the month of May in the second year, but kept the beds as before, clear of weeds and grass, and in the fall, before the berries began to drop, the tops were cut down and removed.

Finding that by the ordinary method it would require more time and labor to dress the beds than I had to spare, and supposing it would be better to apply the manure near the roots than on the surface, I split the ridges with a single horse plough the next season, running twice on each bed, removed the earth left by the plough with broad hoes, and put in an inch or two of fresh stable manure. The garden line was then set over the centre of each row of roots, about 12 inches above them, the earth (well pulverized) drawn up to the line, first from one side and then from the other, with hoes, so as to form a ridge or bed 14 or 15 inches high—the line then removed, the bed raked over, and that completed the dressing. The produce was abundant, large, fine and well bleached. I have continued this practice ever since—the beds were never forked, but when they become dry and hard on the surface, a dressing with iron tooth rakes, puts them in good order again.

The crown of the root from which the shoots are thrown up, seems to increase in size every year, buds forming upon buds, which give it a conical shape. I observe that more and more of these crowns are visible and are cut, in every succeeding year's dressing; but it does not appear to injure them. Forking, I suppose, injures them quite as much or more. I observe also, that the lateral root or feeders, have spread across the intermediate space between the beds, and think it highly probable it might be better to apply the manure there than to the crowns. I tried the experiment last spring on a small scale, but without any visible effect, until the tops were suffered to grow up: it was perceptible in them, though it had not been in the shoots cut for the table, probably because the manure was applied too late.

My success in raising this plant, so far as it depended on my own management, is entirely accidental. I never planted, or owned, or dressed a bed of it before—never heard of its being dressed in this way, and adopted the plan at first to save time and labor, which I had not to spare. I have thirty-nine beds (one row of roots in each) sixty feet long, which are usually dressed by four men in a day and a half.

You say that your inquiries of me are for the information of others. Allow me to recommend to them and to you, applications to Mr. John Carter, at his nursery and vineyard near the city, not only for supplies of roots, but as the best authority in every branch of horticulture. I have always succeeded when his advice was followed, and always failed when I neglected it.

Very respectfully,

Your obt. servt.

WM. H. RICHARDSON.

For the Southern Planter.

TOP DRESSING PASTURE LANDS.

Henrico, Nov. 29th, 1841.

Dear Sir,—I have been very much interested with two communications in the September and October numbers of your paper, on the subject of manuring, over the signatures of "W. W." and "A Hanoverian," and I had hoped that your invitation to subscribers to enlarge the discussion would have elicited many valuable articles on this most important question. I am sorry to find from your last number that your invitation has been unheeded, and the discussion at once abruptly terminated. With the view of calling public attention to it again, I have determined to offer you my views, which you can publish or not as you think proper. The point in dispute between "W. W." and "A Hanoverian," is one which has excited great interest in the agricultural world, for some years past, and is still undetermined. I admit with you, Mr. Editor, that the plan of "A Hanoverian," (ploughing in manure,) is that which is most commonly pursued, but I am persuaded from personal observation, and information derived from other sources, that the course recommended by "W. W." (top dressing) is rapidly gaining ground, and is infinitely preferable. If it can be shown that there is no greater loss or expenditure of the fertilizing principles of manure, in this last than in the first mode, then its superior advantages for convenience will be at once manifest to every practical farmer—among these I will only enumerate two. In the first place instead of hauling your straw, leaves, weeds, &c. (I take it for granted that every good farmer does haul these things) into your farm pen or stable yard, you haul them at once to the field, thereby saving half or nearly half the labor of hauling, and enabling you to manure nearly double surface. In the second place you can, adopting this mode, apply your manure at all seasons of the year when not engaged in other farming operations. On the contrary, by the other plan, you can only apply it in the spring and fall, and then only when the land is in

order for ploughing. There are other advantages, in this method, which I could enumerate, but as they will readily suggest themselves to the minds of all practical farmers—and I wish to be brief—I shall content myself with these two, believing them to be most important.

We now arrive at the most difficult points in the discussion—what I suppose to be the gist of the matter in dispute between "W. W." and "A Hanoverian," viz: In which mode of application does the same amount of manure act most beneficially? Does the "mere covering" of the land increase its fertility? If so, *quo modo?*—These, Mr. Editor, are very important matters, involving the whole question of the *modus operandi* of manures, and I approach them with great diffidence, having no expectation of answering them satisfactorily, but resolving to throw out the suggestions of my own mind, hoping that abler heads may be induced to investigate the subject, and give us, through your valuable journal, the results of their researches. In regard to the first question, I have no hesitation in declaring it as my firm belief, that the same quantity of manure, either animal or vegetable, decomposed or undecomposed, will produce more *fertilization* applied to the surface than when ploughed in; and I fully agree with "W. W." that the "mere covering of the land makes it wonderfully productive;" and I moreover strongly incline to the opinion, that the "mere covering" is one of the great secrets of the superiority of his plan. If this opinion be well founded, of which I feel firmly persuaded, despite the long array of authority in opposition, what a wonderful revolution in agricultural improvement would be effected by its general adoption.

Let us inquire what are the advantages to be gained by subjecting our vegetable manures to the "trampling process?" For the life of me I cannot see one of any consequence. It is true we mix them with the excrements of our cattle, and perhaps can distribute the animal manure more equally or uniformly on our fields; but will any one contend that this mere convenience can compensate for the immense additional labor? This reminds me, Mr. Editor, of the old fashioned mode of sowing turnip seed, mixed with ashes or sand. If hauling *litter* into our farm pens, could by any possibility increase the animal excrements, then truly it would be a wonderful advantage. Will the friends of the trampling process tell us that a heap of vegetable matter cut to pieces with the hoof and mixed up with animal matters during the winter gets into a prodigious fever and sweat, and in the spring becomes perfectly mellow, assumes a fine black color and is exceedingly rich, &c. Now all this I do not gainsay, but I should like to be informed in what manner that same heap of vegetable matter has acquired any of the elements necessary to fertilize land which it did not possess when first deposited there, of course excepting the animal matter. On the contrary, has it not lost nearly or quite 50 per cent. during the operation of sweating? and notwithstanding the addition of animal manure, the heap has lessened nearly one-half. What has become of it? Gone, gone. We have lost from our compost bed enough of carbonic acid gas, ammonia, nitrogen, and other fertilizing gases, to have nourished a whole field of corn. Again, in the spring of the year this manure is generally carried to the field and deposited in small heaps.—After it is all hauled out, all hands turn to scattering, and it is thinly spread out and exposed for 24 or 48 hours longer before it is ploughed in, and then perhaps, imperfectly.

Mr. Editor, did you ever bring your nasal organ within the range of smoke ascending from one of these heaps of manure when being dug into in the spring? If you have not, I can assure you you would be in almost as much danger of losing your breath as if you had applied to the same organ a wide, open mouth bottle of aqua ammoniæ. Why sir, if the nutritious gases escaping from a heap of this description every five minutes could be sufficiently diluted, and applied, it would afford a week's supply of food to a moderately sized field of grain. This too, escaping at a period when there is no growing crop, not a blade of grass to desorb or detain the smallest particle. It is all gone—vanished into thin air. Seriously, I have no doubt but that the loss at this period is immense, and has not, I fear, sufficiently arrested the attention of farmers. I contend that by adopting "W.W.'s" plan none of this loss occurs, or at least, comparatively little. When the undecomposed vegetable matter is spread upon the pasture land in the spring or summer, the decomposition, or more properly speaking the combustion, is very slow, and the various elements which it contains are evolved very gradually. Those which are volatile, the carbonic and nitrogen gases for example, are absorbed as rapidly as they are yielded, by the grass and weeds of the field, and the nutritive mineral bases not volatile, and which are equally necessary to the growth of plants, are carried into the earth, by the rains and snows, as fast as they are liberated from their chemical combinations, and taken up by the roots of plants, causing an immense growth of weeds, and cover for the land, and these in their turn restoring to the earth not alone the food derived from the top dressing, but adding their original stock to the capital.

I will close my communication (already too long) by adding a few words in reference to the last query: Does the mere covering of land increase its fertility? Although I have expressed the opinion above that it does, I fear, Mr. Editor, I cannot satisfactorily account for it. I will,

however, present the reason which has occurred to my mind, hoping that if any one can account for it more satisfactorily, he will not hesitate to do so, through your columns. We know that neither heat nor moisture alone is sufficient for the decomposition of animal, vegetable or mineral substances, but there must be a combination of both these agents. I therefore suppose that a top dressing of straw, leaves, &c. prevents the rapid evaporation of moisture from the land, thereby preserving it for a much longer period in a condition favorable for the development or evolution of those substances, vegetable, animal and mineral, necessary for the growth of plants, and that, therefore, a much larger amount of this nutritive matter will be furnished for succeeding crops than if the surface of the land had not been covered. Respectfully,

J. R. G.

We are happy to present to our readers another article from the pen of Mr. Morriss, upon the management of Tobacco. We have assurances from high authority that his dissertation is more thoroughly practical and useful to the planter in Virginia than any other that has ever appeared in print. The numerous inquiries from our readers for the continuation of what we have published, evinces the great interest his essays have already excited. We hope Mr. Morriss will not remain content with the laurels that he has won, but that the meed of public approbation will only stimulate him to further exertions in the cause of agriculture.

We have been at some pains to procure a good cut of the prize of which Mr. Morriss sent us a drawing, and which we are inclined to think the best and most economical in use. It will be found at the foot of this article.

TOBACCO.

Continued from page 144.

After the stems and stalks of the tobacco are thoroughly cured, and after a few hard frosts, a part of the crop may be taken down for stripping, so that the hands may be employed in rainy weather, though planters generally prefer that the larger part should remain hanging up in the houses until the last of November or December. Before taking down the tobacco, it will be necessary to haul straw to each house sufficient to cover the top, end and sides of the bulk, at least six inches thick.

When a season of soft, damp or rainy weather occurs, and the stems will bend their entire length without breaking, the tobacco is taken down, pulled off the sticks, and laid on a bed prepared by placing the sticks side by side on poles, and covered with a thin coat of straw. The length of the tobacco sticks about 4 feet 3 inches constitutes the width of the bed, and a sufficient length to hold the tobacco to be taken down; so that the bulk will not exceed 4 or 5 feet in height.

After the tobacco is neatly packed down, it should be covered with straw, and with tobacco sticks, all around and over the bulk, to prevent its drying, and thereby avoid much inconvenience and loss which will be sustained if it dries in bulk.

When the stripping commences, the negroes who have had most experience, and who are considered best judges, sort the tobacco. The richest, longest and most perfect leaves are selected for the 1st quality; those which are less perfect or rich, or which have not sufficient length, for the 2d quality; and the refused leaves for the 3d quality, or lugs.

The first and second qualities are tied in bundles of 5 or 6 leaves, with the half of a fine small leaf, neatly wrapped around the heads, and about an inch down the bundles; carefully observing that the leaves in a bundle be as near as possible of the same length. The lugs are tied in bundles of a dozen or more leaves, without much care. The first and second qualities are neatly placed away to be afterwards bulked; whereas it is better to have a hogshead ready, and prize the lugs as soon as stripped. This saves labor and prevents loss.

When sufficient quantities of 1st and 2d qualities are stripped to form a bulk of each quality, beds are prepared as before described; two bundles of tobacco are taken up, the heads placed even, and the bundles are straightened, pressed and drawn through the hands of one person, then given to another, who likewise presses the bundles and draws them through his hands, and passes them to the bulker, who packs them down; two more bundles are treated in the same manner, and placed as close as possible to the first two; and so on the whole length of the bed; the bulker then passes to the other side, and places the bundles in the same manner, lapping the tails about one third of the length of the bundles, and continues first one side of the bulk and then the other, until the bulk is finished. The bulk is then covered with plank, and a few rocks or other weight put on.

These bulks remain in this situation until the month of March, when the tobacco is placed on thin sticks, smoothed with a drawing knife, and in dry weather hung up in the house. The sticks are placed about 10 inches apart, so as to admit a free circulation of air, that the tobacco may be perfectly dried. After it is perfectly dry, it should be taken down the first season, for if it gets in high order, the benefits of the previous bulking are lost. It should therefore be carefully watched, and whenever the leaf and the small part of the stem, about one-fourth its

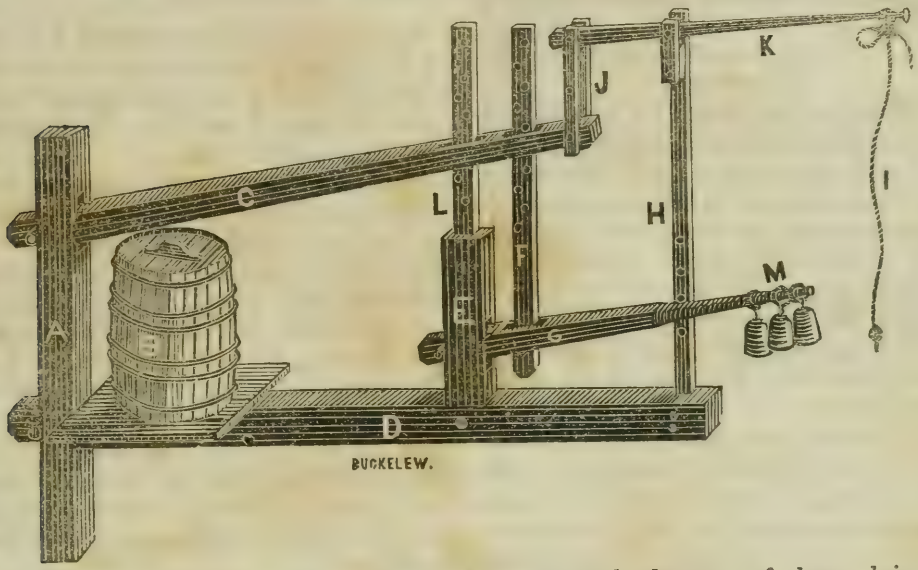
length, will bend without breaking, to be immediately taken down, and placed away in a bulk on the sticks like shingling a house, until the planter is ready for his second bulking, and carefully covered with straw; and when there is favorable weather, such as will not change the order, the tobacco should be moved to a close house with a plank floor, and again bulked as above described; except that 3 or 4 courses may be substituted for 2, and heavily weighted.—The tobacco ought to remain in this second bulk three or four weeks, before it is prized. It is packed in the hogshead in the same manner as it is prized, except that only one bundle is straightened, pressed and drawn through the hands, and passed to the prizer at a time.

I send you a drawing of a tobacco prize, which I consider better than any I have seen, except the screw, which is too costly for general use.

RICH'D G. MORRISS.

Buckingham, Oct. 10th, 1841.

TOBACCO PRIZE.



A. The stump part, 3½ feet in the ground.

B. The hogshead under prize.

C. The beam, 16 feet long, 10 by 12 inches.

D. The sill, 10 by 12 inches, morticed in the stump, and placed two inches below the earth, so that a bed of two inch plank for the hogshead to rest on will be even with the surface.

E. A permanent sword morticed in the sill, with holes for prizing above, and a shoulder at L, to prevent the beam from being below a horizontal position.

F. A movable sword morticed into lever G, so as to permit the lever to move up or down, and fastened by a pin of iron.

G. A lever 12 feet long.

M. Three fifty-sixes, to put on the lever after a good set is taken.

H. A fork strongly planted in the ground.

K. A pole with a rope.

I, at one end, and a frame J, at the other, to raise the beam with.

COMMON SOAP AS A REMEDY FOR BURNS.

BY THOMAS WILLIAMSON, M. D., EDINBURGH.

In case of burns, common soap, besides its great value as a local application, commands the additional advantage of always being at hand in cases of emergency. The mode in which I am in the habit of employing it is this: A common shaving box may always be procured, from which a good lather may, in the course of a minute or two, be easily obtained. This lather is then gently laid over the burnt surface by means of a shaving brush, and repeated so soon as the first coat begins to be dry, or the pain returns. This practice ought to be repeated occasionally during the first day, or until such time as the pain is relieved. The benefit accruing to the patient is *immediate* and the result of the practice highly satisfactory; for in more superficial burns, if early applied, vesication is prevented, and in the course of a few days, desquamation of the cuticle follows, without leaving a raw surface. Of course, this as a remedial measure, is most applicable to superficial burns; but even in such cases as involve destruction of the more deep tissues, it is not used without advantage, in so far as the personal comfort of the patient is concerned. In such cases after the lapse of a few days, the crust formed by the soap is easily removed, so as to permit the employment of other remedies, if necessary. I am not prepared to say whether the benefit

and instantaneous relief, following the application of the lather, are to be ascribed to the chemical composition, or simply to the fact of its affording some degree of protection from atmospheric agency or both.—*London Medical Gaz.*

APPLE TREES.

The Editor of the New England Farmer speaks of it as a well known fact, that any land from which a growth of forest trees has been lately removed, (in our vernacular, *new grounds*) is peculiarly favorable to the growth of the apple tree.

THE HOG.

We hope our friends will not be induced by the very low price of western pork, this winter, to abandon the raising of hogs. That three or four dollars a hundred is less than pork, beyond a certain amount, can be raised for, in this vicinity, we are ready to admit. We say, beyond a certain amount, because, there is a certain amount, and that no inconsiderable one, that may be raised upon refuse and offal, that would otherwise be lost. This does not cost *two* dollars a hundred.

But we must remember that the graziers of the West are complaining dreadfully of the low price of pork. It cannot remain at its present rate for another year, and there is no more certain way to secure its rising to an exorbitant height, than for the eastern people to divest themselves of their stock.

Moreover, we should be very glad to receive from a competent hand a new calculation of the cost of one hundred pounds of pork, raised in Eastern Virginia, at the present day, with an improved stock, and under an improved system of cultivation. If the day has not already come, it will soon arrive, when more care and better management will enable the East, we believe, to raise her pork cheaper than it can be driven to her even from the fertile forests of Ohio. It is, however, a matter entirely of calculation; and if the West, from natural advantages, can send us this article cheaper than we can raise it for ourselves, we should be madmen not to purchase it. Will some of our friends, competent to the task, afford us some information upon this subject? It is very evident that the people of this country are just beginning to appreciate the advantages of agriculture; the great forests of the West are soon to be settled; and if they can there produce corn for fifty cents a bushel, and send it to us at that price, in cured bacon, it is evident that we will take of them as much as we can consume in that form, and turn the labor now engaged in that proportion of the production into a more profitable channel. But until these facts are ascertained, and the trade so extended as to be placed beyond the control of monopoly, we warn our friends to be careful how they place themselves in the power of the Cincinnati packers.

VISIT TO ENGLAND.

The celebrated stock importer, Mr. A. B. Allen, has just returned from an agricultural visit to England, with a new importation of Berkshires. Of these it seems he has introduced some extra varieties, calculated to throw our present stock completely in the shade. The Kenilworths, we believe, is the title in which this new family rejoices. They aspire to the weight of 1,300 pounds per hog, and are all white. Mr. Allen himself, however, seems to prefer some black Berkshires, that will not exceed the trifling weight of 800 pounds. It is absolutely necessary to get up something extra, every now and then, to gratify the morbid appetite of the lovers of the marvellous; and we sincerely hope that those gentlemen, who take so much pains to minister to so praiseworthy a passion, may find in its universality a fair field for speculation.

From the "Spirit of the Times" we learn, that Mr. Allen thinks our imported cattle equal, with a few exceptions, to the best in England. The Pennsylvania draught horse he considers superior to the English cart horse, and in point of bottom, he thinks the English surpassed by the American race horse.

In seeds, Mr. Allen found the British farmer quite as careful in selecting for sowing, as in choosing breeders for his stock. Their implements of husbandry he thinks more complex and intricate, without being more effective than our own.

With respect to the Berkshires, Mr. Allen declares that the real Simon pures are black, or a dark rich plum color, with a slight flecking of white: the white and light spotted he pronounces spurious breeds, and of far inferior quality and shape.

THE COW.

How much a certain supply of good milk conduces to the comfort of a family: how much

inconvenience is occasioned the good wife by the failure of the cow "to come up," or any other accident which deprives her of this necessary addition to her culinary stores! How often it happens that all the art of the milkmaid fails to extract the necessary supply from the dozen miserable looking cattle she is sent to drain! What a contrast does such a scene present to one we lately witnessed. We were invited to call and see a cow belonging to a poor man in this neighborhood, to whose family she was the chief means of support. We called about milking time, and found this beautiful animal well housed, well fed, well curried, and in the act of being well milked. The rich stream that was flowing from her generous bag would have more than sufficed to supply the wants of any one family, and was certainly greater in amount than that obtained from a whole plantation of cows that we have seen. Why will any body, who does not intend to sell milk or butter, keep more than two cows? One good one is generally sufficient. It is not necessary to urge the convenience and economy of keeping one good cow *well*, instead of a half dozen indifferent ones *badly*. We believe the community are well aware of the difference. But the truth is, the cattle in this region, generally, are so indifferent that it is a difficult matter to get one good cow; and with us importation is out of the question. What is left then but that our farmers should pursue the course pointed at by us on a former occasion? viz: by selecting the best of our native stock, and judicious crossing, build up a good stock of our own. The man who will early turn his attention to this matter will find his account in it. A native or acclimated stock, every thing else equal, is worth fifty per cent. more than a foreign one. An hundred cows per annum may be sold in the city of Richmond, alone, at one hundred dollars a piece, if they are of the quality that may well be produced in a few years by proper attention.

The Ayrshire we incline to believe the best cross for the native cattle of Eastern Virginia, and the importation of a good bull would, we think, amply remunerate the importer, provided, he would calculate to use his services in raising a stock of milch cows for this market. When the character of such stock came to be established, and the farmer knew where for one hundred dollars he could get a cow that, well fed and attended to, would supply his family with milk and butter, we believe that the probable demand would be, for some time, greater than the supply. For this purpose the river farms below are admirably adapted; for they have this advantage, that whilst this stock can be transported above, not only with impunity, but with actual advantage, it is a well known fact that cattle cannot be brought down from the upper country, without the greatest risk.

That our friends may the better judge of those outward and visible signs, that mark a good milch cow, we subjoin the following article from the "Tennessee Agriculturist":

"If we ever rightly appreciate the cow, we will understand the secret of breeding cattle of one shape for milk, another for beef, and still a third for oxen. We will learn the milk cow must have light fore-quarters and brisket, thin neck, delicate head, soft, silky coat, wide hips, and thin thighs; while the best animal for beef, has a short thick head and neck, heavy quarters, round barrel and short legs; but the ox is longer in the limb, body, and indeed in all his proportions. When breeding domestic animals is reduced to a science, the different breeds for the milker, beef and ox, will be discussed with the greatest gravity, and the particular structure of each will be considered indispensable. Not only so, but the proper management of cattle in each state of their growth will be looked upon as a matter of more importance than the attention now given to the racer in each year of its growth. When we esteem the cow as we should, we will have her winter quarters, in point of comfort, next to the family dwelling; and we will learn that even currying is at least as serviceable to the cow as the horse. The proof that we do not put a proper estimate upon the cow, requires no other argument than the fact, that not one farmer perhaps in fifty has even a comfortable shelter or wholesome winter food for cattle. In Tennessee, we have enough of the improved breeds, and we trust a sufficiency of knowledge to *commence improving*. If we, as farmers, study our own comfort and interest, we will produce breeds of cattle more valuable than any yet in existence, and the prices heretofore given for the best short-horned Durham, will be no more than a 'starting bid' for them. There is no doubt in the world, a race of cows may be made which will give a bushel of good milk each per day, and could we imagine an adequate price for an animal of this description?"

FERMENTATION.

In fermentation, vegetable matter undergoes a chemical process that renders it much more so-

luble and nutritive. This has been demonstrated and admitted by the best chemists—the same effect is produced in a more expensive manure by the application of heat. The natural process may, therefore, be economically substituted for the artificial one, especially in the preparation of food for hogs.

The plain English of all which is, that we would advise you to let your hog feed stand until it sours.

SEA-SAND.

In Europe the happiest results have been experienced by the application of sea-sand to cold tenacious clays. Independently of the mechanical effect, produced by the disintegration of the particles of clay, all sands from sea and salt-river shores, are charged with large quantities of saline and oily matters, which exert a highly beneficial influence in the improvement and melioration of the soil. We mention this fact, because we are aware that on the margin of our seaboard and salt-river States, there are thousands and tens of thousands of acres of cold livery clay lands greatly exhausted from improper cultivation, and we are firmly of the opinion, that by draining these lands wherever they may require it, and admixing with them from fifty to one hundred loads of this sand to the acre, that a very solid improvement both in the texture and productive capacity of the soil will be thereby produced.—*American Farmer.*

MANURING.

The following article, from the South Carolina Temperance Advocate, is worthy of consideration. To save the labor of hauling out manure, and to prevent the loss of the volatile alkalis, are great desideratums, which are undoubtedly obtained by the plan recommended. The difficulty, we should suppose, would consist in the disadvantage of having cattle sometimes at inconvenient distances from the barn and the homestead; and at any rate, a due regard to sheltering would render the system impracticable for one portion of the year, at least.

The system of covering the manure as soon as made, we believe to be good, whenever practicable. It was highly recommended by a correspondent in a former number of the Planter.

"A friend of ours, who deservedly holds a high rank as a practical planter, in all its various details, gave us, in conversation, the plan he pursues in manuring his land. He owns about one hundred and fifty head of cattle, all of which are driven home in the evening and penned. His cow-pen is half an acre in size. He pens his cattle in one place, three nights, and then moves it forward, so as to cover half an acre more, and a plough follows immediately and turns under the manure, on the half just occupied, so that nothing is lost by evaporation. He continues this throughout the year, at the end of which he has about a hundred and twenty acres well manured, and the manure all well turned under, so that he has lost none.

"The trouble of moving such a small pen so often, he thinks is less than it would be to wagon out the same amount of manure, and scatter it; and then by his system, he saves a vast amount that would be lost by evaporation, if permitted to be long in a heap.

"But he gains, too, in another important particular; this secures for his cattle greater attention than is ordinarily bestowed on stock, and prevents his losing a large number.

"We asked if he did not haul straw and leaves to his pens? He remarked that his land was a light, porous soil, that would not bear this kind of manure; but that after his cattle had remained two nights in a pen, he hauled in a rich, clayey soil, from a large swamp near him, and scattered this over the pen, and the cattle were penned on this the third night, which was, of course, turned under too. He thus not only enriched his land, but produced a permanent change in the physical structure of the soil.

"We regret that we are not at liberty to use the gentleman's name, as authority for the advantages of this system, for he would be recognized by many of our readers as a most successful planter. And in connection with his success in planting, he remarked, 'it is owing wholly to planting short to the hand, so as to afford me an opportunity to manure highly.'"

BREEDING.

We know no subject upon which more nonsense is written than on the principles of breeding. Experience and observation have undoubtedly discovered valuable facts in this important branch of science; but the mysterious nature of the subject has opened the door to the promulgation of vague, contradictory, and visionary ideas. To which class the following, taken from an exchange paper, properly belongs, we leave it to the more skilful to determine:

"If a man has a superior milch cow, and wishes to raise milking stock from her, the common plan is to save her heifer calves. But according to a principle of breeding, sustained by facts as well as theory, by far the better plan would be, to save a bull calf from this cow, and his stock when he is put to breeding will have the excellent quality of his dam, and be, like

her, superior milkers. For example, Cleopatra was an extraordinary milker, according to this principle her heifer calves may, or may not, make good milkers; but her bull calf Frederick, having her character and qualities bred in him, will communicate them to his stock; and his heifer calves will be, like his dam, superior milkers.

"This last principle suggests an important consideration in selecting a breeding bull, viz: that he be descended from a superior milch cow."

HOGS.

The following description of the points of a good hog is taken from that standard little work, the Farmers' Almanac:

"As this species of farm stock justly occupies much of the attention of the farmers of the West, at this time, we shall devote a chapter to a sketch descriptive of those breeds in which the most interest is felt.

"Let us see first what constitutes a good hog. The head—though it is certainly preferable that this should be short, handsome and sprightly, with thin, small, pointed and pendulous ears; yet good hogs may have a long and somewhat coarse head, with a heavy, flopped ear. The jowl should not be too heavy—the flesh of that part is coarse and of little value; and moreover, it denotes a too great aptitude to fatten, frequently to the serious injury of the breeding qualities. The neck short, and not too heavy, fitting well on to the shoulder; the shoulder not quite as high as the loin, thick and of good substance, rounding well out: the constitution is generally in proportion to the capaciousness of the breast and loin. The brisket coming well down, and the distance between the fore legs as great as possible. The back broad and straight, and rather slightly arched than otherwise, and particularly no sinking immediately behind the shoulder. The ribs well arched, forming a good barrel, and supporting the belly well. The loin, as before remarked, wide and full, with the ribs coming well back. The rump rounding off evenly, the tail well set on, tapering and thinly haired, except the tuft, which may be heavy; in some breeds the tail is curled like a cork screw. The ham must be of good size, round and plump, and swelling out so as to come in a line with the shoulder: such a formed ham will weigh well to its size. The hips wide spread, and the twist coming well down; the flank deep and full; the belly roomy, but not coming too near the ground. The legs straight and fine in the bone; the muscles heavy, particularly in the thigh and arm; the hock pointed; the pastern joints firm and strong, not resting the dew-claws on the ground, so that the animal has a bold and erect footing; a thick, fleshy leg will not carry a heavy hog to a distant market. The skin thick, but tender and gelatinous, and easily masticated, even in the shape of roasted crackling; soft, and handling well, and free from eruption. The hair smooth and soft, no bristle on the neck, shoulder or back. It has been observed, even by some of the oldest writers that 'smooth, soft haired hogs are most suitable for warm climates.'

"Though the above described form and qualities are those that in our view constitute the best hog, yet, like all other kinds of farm stock, they should in a measure be adapted to the climate, situation with reference to market, nature of the keep, and the circumstances and management of the farm."

CLEANING PAINT.

Housewives should be careful not to wash paints, especially *green*, in *strong* soap suds: the lie has the same effect on paint that it has on grease. When it does not destroy the paint, it may affect the lustre.—*Exchange paper.*

We are indebted to the lively imagination of Mr. John B. Miller for the following description of the effects to flow from the late important discovery of Dr. Boucherie's method of preserving and coloring wood, heretofore noticed in this paper:

"The discovery, by Doctor Boucherie, of a process by which liquids may be infused into living timber, is an invention, the benefits of which almost surpass computation. By means of a most simple application of a force contained within the tree itself, the wood may be rendered much more durable, its elasticity preserved, the variations in volume on account of exposure to different degrees of moisture avoided, its combustibility destroyed, its strength and solidity increased, and every shade of color and variety of odor cheaply, easily and expeditiously imparted. The benefits to be derived from this simple discovery will be as numerous as the purposes to which wood is applied are various and useful. Dr. Boucherie has, by this discovery, become one of the great benefactors of the human race. For there are none so high as not to be benefitted by it, and none so poor as not to participate in its advantages. Whoever lives uses wood, and whoever uses wood will be benefitted by this discovery. If the invention is generally applied, and it is folly to suppose that it will not be, fire insurance companies may close their offices, and the fire departments break up and disband. Masons and painters may for the most part turn carpenters, and a light and simple *boucheried* wooden edifice will surpass in beauty the splendor of the heavy and expensive marble palaces of the present day. The poor

man's house will need few repairs, and the carman's truck will last his lifetime. Ships will require no sheathing, and roofs no tiling. The mouse and the rat may bid adieu to their old hunting grounds, and with the moth and the bed-bug retire in disgust from the embittered pantry shelf and odoriferous bedpost, leave these regions of enlightened civilization, and take up their line of march towards the confines of ignorance and barbarism. The luxurious may roll in spiced carriages, and the lady's boudoir be redolent with musked *ébénisterie*. The fact that the most simple discovery may produce the most stupendous results, has, perhaps, never been more strikingly illustrated. The principle is not novel: the originality of Dr. Boucherie's discovery consists merely in the full application of an experiment, which has long since been usefully applied to rid trees of the grub or canker-worm. An infested tree is cleared by perforating it, and filling the bore with sulphur. By this means the sap becomes impregnated with sulphur, and the worm, in consequence, leaves the tree. This fact is adduced, not with any view to detract from the merit of the discovery of Dr. Boucherie, but to suggest the remark, that it is much to be regretted that some one of our own shrewd and intelligent countrymen had not made this discovery instead of the learned Doctor, whose high fame will most deservedly descend to future generations as the discoverer of this astonishing mode of improving and preserving timber. The following account of the manner of operating, and of the substance used, is translated from '*Le Journal Scientifique de l'Académie des Sciences*,' which contained the report of a committee appointed by the academy to examine the discovery of Dr. Boucherie. After highly complimenting the Doctor for his science and ingenuity, the report proceeds to unfold his plan as follows:

"'In order to infuse preservative or other substances into living timber, recourse is had to no other force than the capillary attraction, by which the tree takes up its sap. Let the tree be felled when the sap is in full flow, and plunged in the liquor that it is desired it should imbibe, and in a few days the liquid will ascend even into the leaves at the farthest extremities, every fibre, except the heart of the tree, becoming perfectly saturated. It is not, however, necessary that the tree should be cut down, for it is sufficient to bore it at the foot, or merely to saw it rather more than half through, and then apply the liquid to the incision, and a rapid and complete absorption will ensue. If it is desired to increase the durability and hardness of the timber, and thus prevent its decay, the pyrolignite of raw iron should be infused. This substance is exceedingly well adapted to the purpose, inasmuch as impure pyroligneous acid is produced in all our forests by the fabrication of charcoal, and this is easily changed into a pyrolignite of iron, by bringing it in contact with old iron. Moreover, this preparation contains a quantity of creosote, which substance, independently of the salts of iron, has itself the property of hardening the wood, preventing ordinary decay, and injury from insects. To preserve the timber elastic, and destroy its combustibility, Dr Boucherie recommends the chloride of calcium, or a still cheaper substance, the water from a salt marsh. Wood prepared with these saline solutions retains its flexibility after several years of exposure to the atmosphere, and in their slips may, without breaking, be twisted in spirals, and again untwisted. Exposed to the atmosphere, it neither warps nor splits, no matter how dry soever it may become; finally, from the difficulty with which it burns, it is incapable of spreading fire. Wood is, by this process, colored in such different shades, and with the tints so beautifully mingled, that it cannot but cause a vast improvement in all cabinet ware. The pyrolignite of iron gives a brown tint, which contrasts prettily with the natural color of such parts of the wood as are too compact for the pyrolignite to penetrate. If, after the absorption of the pyrolignite of iron, some tanning liquor be infused, it produces an ink in the body of the wood, and can thus be colored blue, black or grey. Let an absorption of the pyrolignite of iron be followed by an infusion of the prusiate of potassa, and Prussian blue is formed, and by introducing successively the acetate of lead, and the chromate of potassa, chromate of lead (chrome yellow) is produced. If in the same tree are infused the pyrolignite of iron, the acetate of lead, the prussiate and chromate of potassa, they form different shades of blue, green, yellow and brown, and produce the most varied effects. In the same manner timber may be impregnated with odoriferous liquids, and every variety of odor imparted to the wood.'"—*Northern Light. Utica, October*, 1841.

UNDER DRAINING.

We are glad to find our own views on this subject enforced by the following, from a distinguished correspondent of the Farmers' Cabinet:

"*Mr. Editor*,—This is the season for making under drains; the leisure of autumn and the open weather of winter cannot be so well employed as in this most necessary and all-important operation: by this means, too, labor is found for our helps at a time when, otherwise, they would be suffering privations from the want of employment; and when the business is judiciously conducted, it is sure to pay a per centage upon the cost, far greater than any other that can be devised, as that land which has been reclaimed by draining will oftentimes require no

manuring for an age; the herbage, too, being of a peculiarly different species from that hitherto produced, and far more nutritious. It must be observed, however, that drains cut at this season of the year should be filled and finished immediately, lest the frost might shake the sides of the newly-cut earth, and render the labor in a measure abortive, by partially filling them, before the stones, or other articles used, are placed.

"On land that has been drained, the system of subsoil ploughing can be adopted with tenfold advantage, which is an object of the highest importance, for there is no doubt, the use of the subsoil plough will ere long be in very general requisition on almost all soils, having been found as valuable on light lands with retentive bottoms, as upon those of a more compact and stiffer surface—rendering, as has been observed, all soils drier in wet weather, and more moist during a season of drought. On this all-important subject, I find some interesting remarks in the Southern Planter, a new agricultural periodical, published at Richmond, Virginia, which stands high in public estimation, and deserves the liberal support of the country through which it circulates."

"Here he quotes the article from page 129 of the Planter, and then adds:

"There are many articles used in the filling of under drains. On the old and low meadows of England, it is usual to cut drains eighteen inches deep and twelve inches wide, and in the middle of the bottom of these, to sink a foot deeper, only three inches wide; then, to take the turf that had been cast off at the first opening and turn it, sod downward, on the shoulders of the drain, and fill the mould upon them; and these drains have stood in perfect order for an age. Then again, on other meadows it is the custom to sink a deep and narrow drain, and place in it the branches of beech, osier, or other aquatic timber, covering them with straw, &c. and filling in the earth, and these also stand and perform well. But when stones of proper size can be obtained, a preference is due to them over every other material, for if the drains are carried so as to have a slight declination only, and carefully filled, they will run for any length of time: where stones are not to be had, however, tiles are used very extensively; and two pine boards nailed together and placed in the bottom of the drain, so as to span it, the axis edge upwards, has been found a cheap and very excellent substitute for them. But, upon the principle of the working of the subsoil plough, if land be cut into wedge-shaped deep drains, and these be filled again with the matter that has been thrown out, after it has had time to dry, they will be found to keep open and run, perhaps for any length of time, even for an age. In any view, therefore, draining in some form or other ought to be practiced very extensively on land requiring the operation. it is the *ne plus ultra* of good husbandry."

We had imagined our suggestion about the plank drain to be new, but are happy to find that its value has been tested by English experience. There are several circumstances that render it much more economical and suitable here than there; and we have no doubt that it may be introduced extensively, to great advantage.

PREPARATION OF FOOD FOR HOGS.

Grain is worth far more, as food for animals, ground than unground. Cooking food, also adds greatly to its value. Some have estimated cooked meal at fifty per cent. more in value than uncooked. There can be no doubt that grinding and cooking grain will make an improvement, far excelling in value the cost of these operations. They will probably add nearly one hundred per cent. to the value of the food.

It is well to have a mixture of food for hogs; it is less cloying, and induces more thrift. Roots of various kinds, with apples and meal, make an excellent and cheap food. Pumpkins may be added, or pumpkins, meal and apples, may be used, if no roots are at hand; sweet pumpkins and sour apples, with meal, form a very palatable and nourishing dish.

All these kinds of food, excepting the meal, and that may be used sparingly, are very cheap, and yield a large amount to the acre. Apples are produced with little labor, after the trees once attain a good size. They are probably the cheapest food that can be produced in New England or the Middle States. And even in the West, where grain is raised with little expense, apples may be produced with little expense also.—*Farmers' Journal.*

CABBAGES.

A correspondent in the Farmers' Cabinet recommends very highly cabbages as food for cows and hogs. They should be boiled, he says, with corn cob meal, when they will be found superior to any other food. They are much used for milch cows about London. He proposes the following plan for preserving this vegetable through the winter:

"Let the cabbages be cut in fine and dry weather, and after stripping off a few of their outer leaves, lay them singly upon straw—which must be clean and dry—on the floor of a barn or outhouse, well secured from the rain; upon

these lay more straw, and then a line of cabbages, and so continue to any height you may choose. The mode of burrying them head downward in the earth, appears, to say the least, a troublesome and dirty business, by which their outer leaves become corrupted, and oftentimes a portion of the cabbages also."

LARD.

As the season is approaching, we copy Mr. Lewis's mode of trying lard for the benefit of our pork curing friends. Mr. Lewis is known as one of the most extensive and successful pork curers in Kentucky; raised in Virginia, he has sustained in his adopted state the well established fame of the Old Dominion.

PREPARATION OF LARD.

Messrs. Gaylord & Tucker.—The following is our mode of trying up lard, of which we make three qualities; that from the intestines, that from the leaf-fat, and that from the upper part of the back-bones. The latter is the *superfine.* So soon as the intestines are taken from the hogs, while yet warm, the fat is rid off and thrown into cold water, where it remains to soak some hours; it is then washed out and put into other fresh water, in which it remains until next morning. It is then cut up into pieces not more than two or three inches long rinsed again and immediately put on in iron boilers *thoroughly cleansed.* The fire is then applied, which must be free from smoke during the whole process of boiling, which should be continued for at least twelve hours. It is very frequently stirred during the boiling, and the bottom of the boiler scraped hard with the sharp edge of the iron ladle, to keep the cracklings from adhering and burning, which they are apt to do towards the end of the process. if the fire is strong and the boiling rapid. When the cracklings *begin to burn brown*, and the lard becomes clear as water and scarcely any evaporation is visible, the fire should be slackened. The bubbles rising to the top will be as clear as cut glass. Continue the *simmering gently* until the cracklings are quite brown. They never become *crisped;* but although brown and entirely done, will be soft and flabby. The clearness of the lard, the brown color of the cracklings, the crystal purity of the bubbles, and the nut-like scent arising, indicate the end of the boiling. Take the boilers off the fire, or extinguish the fire, and when the lard is so cool that you can bear its heat on your finger dipped into it without pain, strain it off into clean tight vessels. Exclude the air; and you will have a nice article even from *gut fat.*

The leaf and chine fat are soaked in water at least forty-eight hours, after being thoroughly washed, and cut up into bits not more than cubic inches in size. The frequent agitation and stirring of these in the cold water, makes the lard much better. When put into the boilers the water should be carefully drained off, so that as little water as possible should go into the boilers with the fat. Apply the fire, and in eight hours these two kinds, which should be kept separate, will be done. The lard clear as water, the cracklings nut brown and *crisp*, and giving *as they simmer* the sound of rustling dry leaves, emitting the scent of nicely fried pork, and giving off scarcely any perceptible evaporation. Stir very often during the boiling and let no cracklings stick to the bottom of the boiler. For the last hour the *boiling* should be very gentle, *rather brisk simmering* than boiling, to prevent burning, which must be most carefully avoided. Cool and strain off, and exclude air as directed for gut fat, and you will have a snowy white, firm, fragrant article, that will keep for years without the slightest alteration. Never put another parcel into the boilers during the process, and when one parcel is done, have the boilers most carefully scoured, and so clean that they will not soil a cambric handkerchief. Much depends on thorough washing, soaking, and agitation in clean pure water before boiling; much on careful boiling and stirring, but most of all on the perfect purity of the boiler. The slightest rancidity, burnt grease or oxydation will impart to the whole parcel of lard boiled in it, offensive or injurious scent, taste or color. Although I have stated the *usual time of boiling*, you must not be governed by *the time*, but by the *indications* mentioned as produced by boiling. These indications must appear, no matter what the time has been, before the boiling or trying up is complete. Leaf and chine lard thus prepared are superior even to the best butter for making pastry, biscuit, all kinds of hard cakes and jumbles. Lard, like butter, should be kept in cool, dry apartments, subjected to as little atmospheric change as possible. In this country we usually keep lard in kegs or firkins of the linden or lime (tilia) tree, containing from 55 to 60 pounds. I however prefer well glazed stone jars or tin buckets, because they are more impervious to the air.

Very truly gentlemen,
Your obedient servant,
JOHN LEWIS.

Llangollen, (Ky.) Aug. 27, 1841.

From a very elaborate description of the farm of Mr. Elias Phinney, Esq. of Massachusetts, given by the editor of the Farmers' Visitor, we make the following extracts. Mr. Phinney's name is familiar to the reader of agricultural papers, and we have no doubt he is a man of

great judgment and industry. When we see such a man so successfully contending against the natural obstacles of a barren soil and frigid climate, we cannot help considering what results the same energy and vigor would effect in our own climate, where nature is ever ready to assist, instead of thwart, the labors of the husbandman:

The farm of Mr. Phinney consists of about one hundred and sixty acres, upon that rough ridge of hills dividing the waters of the tributary streams which run into Charles river on the one hand and Merrimack river on the other—a much harder faced soil than is usually found upon the ridges farther in the interior. The elevations at this point are not only full of rocks, great and small, terminating the sharp points of many hills in mere ledges, but a great portion of the soil is scarcely less hard than the rock itself. These rough ridges, after their first clearing, were the favorite haunts of the barberry bush, the cedar, the poplar and the birch, indicating not a very strong soil in its crude state. Yet it is not uncommon, when the masses of stone have been dug from this ground, to find upon it, by the artificial aids of manure and good cultivation, such crops as would do no discredit to the finest and most fertile soil in the country. Such is not the condition of Mr. Phinney's farm alone upon this ground—there are farms all about him at their sides and in the valleys between these elevated ridges, whose productions are creditable to the perseverance and industry of his neighbors.

We have of late remarked that generally in the vicinity of land of one prevailing character there is at no very great distance land of an opposite character, in the intermixture of which an extremely sterile may be converted into a productive soil. In the midst of arid plains we now and then find swamps in which are beds of black vegetable mould, clay or marl; and in some instances it has been discovered that the exchange of silex for clay or mould, and clay for sand or gravel, have wrought wonders in cultivation. The rough ridges of Lexington, in the midst of which Mr. Phinney's farm is situated, are interspersed with bog or peat meadows, some of which have a vegetable mould of great depth. The most of these meadows were formerly ponds—some of them have been recently drained of their former fixed surface of water. Others had so much standing water as to preclude the growth of other than coarse inferior hay of the poorest quality. Others, after the first wood had been cut off settling down into more solidity, were dug up for peat. One of these on Mr. Phinney's farm, from which thousands of cords of fuel nearly as valuable as the best bituminous coal had been taken, has been changed into the most productive hay ground upon his premises.

In the first place a ditch has been made at the edge of the whole semi-circle of the meadow on this side between the soft ground of the meadow and the hard pan of the rising hill just deep enough to cut off the cold springs which formerly fed the meadow. This outside ditch filled at the bottom with rocks large and small leaving the water room to percolate between them, these are covered first with hassocks or tough-sward sods, and afterwards with the soil to a depth so as not to be reached by the plough. Transverse ditches covered in like manner connect the outside with other open ditches at convenient distances on the level of the lowest meadow, and through a main ditch the whole water is carried off to the lowest point of the lot. But this has only been a part of the under-ground work, which has made of this meadow, out of which when mowed at the driest season of the year, Mr. P. said he had when a boy while poling the hay off often sunk to the armpits, a field which will produce the largest crop of hay for the whole life of man. In the most sunken, cold part of the meadow, Mr. Phinney has caused ditches to be made of some eight or ten feet in width extending towards the centre of the meadow from the ditch at the edge. Into these ditches in the winter the stones from the weight of tons to the merest pebble are drawn, while the ground is frozen: filled with the stones to the proper height, the coal black soil of the meadow is dug out, so as to form a new ditch, covering the rocks to the depth of twenty inches and more, so that the plough cannot reach them, and raising the surface several inches above its former position. This process has been repeated, filling one ditch by the digging of another until the good part of an acre of ground has been gone over with a substratum of stones covered by a rich soil which produces year after year the largest crops of hay. The effect of the deposition of rock is the proper draining of the whole surface of the meadow within, so that the land is proof against both wet and drought, and the ground may be readily tilled with the plough and hoe, as often as it may be deemed expedient to break up the sward. The low meadow land, drained and prepared in this way, is said to be excellent for raising early potatoes for the market: this crop on that ground fears no drought; the potato vines are free from rust. On this same meadow we saw at a distance two years ago, when we made a hasty visit to this place, in the absence of Mr. Phinney, a crop of corn growing of a great size, and then supposed the meadow was like the common intervale upon our river where Indian corn is always raised. In 1840, the corn field was put down to a crop of small grain; and this year for the first crop three tons to the acre of the best English hay had been taken from the ground, and a luxuriant second crop was now growing. Two or more acres lower down the same meadow and upon the oth-

er side of the highway, more recently treated in the same manner, last year planted with potatoes, were this year sown down to herdsgrass in April: the grass sprang at once so that a great crop of this first rate hay was taken off in July, and another crop was nearly ready for the scythe.

The meadow made thus valuable—and Mr. P. thinks it to yield him an annual income equal to 6 per cent. upon five hundred dollars to the acre—was prepared at an expense far less than its real value. The bodies of stone upon the ground in the vicinity must be taken somewhere: left at any point above ground, they are much in the way. Upon this farm Mr. P. before he adopted this method had disposed of many thousand tons in the construction of several hundred rods of double wall for fences, until the entire farm was partitioned into convenient enclosures. But the stones were much too numerous, and many of them were too small to be used any where to advantage above ground. Picked and piled up in the summer, a portion of the winter business of the farm was to team these rocks to their useful destination in the underground meadow ditches. Upon this meadow when the fresh herdsgrass runs out after a few years, the ground is at once prepared for a new growth by turning over the sward in September, spreading some ten or a dozen loads of compost manure to the acre, and sowing new clover and herdsgrass.

Mr. Phinney is of opinion that the use of a sub-soil plough, not the Deanston plough imported from England, but one invented by himself, will increase the crop of carrots, beets and potatoes nearly one-half. His sub-soil plough is a large and heavy wooden instrument, in the shape of the Cultivator: it has three large iron bolts at the centre, running all the distance, say of eighteen inches, one behind the other: these bolts, an inch and a half or more in diameter, and 8 or 10 inches clear below the wood, are stump footed at the bottom, pointed so as to perforate the ground. This stump-footed half harrow, half cultivator, drawn by a team of three heavy yokes of oxen, follows the plough in the same furrow, and roots into the sub-soil, some two, three, or more inches, according to the hardness or softness of the ground upon which the prongs operate.

The simple instrument of Mr. Phinney, the plough with three teeth following directly after each other, it does seem to us, may be made a most effective instrument, passing along in an open furrow, turned out by a preceding team with the common plough, in moving the hard pan, and thus laying the foundation for a deeper, richer soil when the stirred sub-soil shall become meliorated by the exposure to the atmosphere.

Sub-soil ploughing is but of recent practice, even in England, whence it was introduced into this country. Connected with under-draining, where the wet which resting long near the surface producing heaviness, and retarding and preventing the progress of vegetation, is carried off unseen, and the upper soil is left dry and light, sub-soil ploughing adds wonderfully to the capacity of the land for production. This matter is well understood and practised in Great Britain—it is adding hundreds of thousands to the profits of farming in that country. Mr. Phinney, with the philosophy which he has applied to other things, seems at once to have stepped into the true process of sub-soil ploughing, of which we had the evidence before us in the case of his carrot beet, and potato cultivation.

ADVANTAGES OF IRRIGATION.

By continued improvements of this kind Mr. Phinney has been able to increase his crop of hay four-fold: he gets a great quantity on a small space of ground. On the kind of land natural to the production of hay, his practice has been for several years to invert the sward to the depth of six or eight inches, with the Prouty & Mears plough adjusting the edges so as to leave no crevice—pass over the ground in the first instance with a heavy roller—spread on ten or a dozen loads of compost manure—harrow the ground lengthwise of the furrows—sow with herds-grass and clover—harrow or brush it in, and roll down close a second time. In this way the field is left in the smoothest condition: the unmoved sward at the bottom has a fine effect upon the subsequent annual crops, making the grass hold on much longer than if it had been stocked down in the usual way. Mr. P. had one field put down in this way which without other preparation had continued to produce for five years in succession full two tons of hay to the acre.

The method of stocking down to grass first after a crop of corn or potatoes, is found to be the best in the drained grounds. Mr. Phinney sowed herds grass in April upon about two acres, and instead of the long process when the seed is sown with grain, of obtaining a crop of herdsgrass in two years, he was able to cut a large crop of hay in less than three months from the time of sowing.

The unevenness of Mr. Phinney's farm enables him much to increase his crop of hay by irrigation. The effect of pure water on grass ground applied at the proper time and in the proper manner, is surprising to those who would suppose that the pure element intrinsically has no fertilizing quality. Mr. P. has ascertained that land will produce large crops of hay year after year, with no other application than flowage in the spring, when fresh water makes brooks that become dry a greater part of the summer. He has contrived to turn a stream of water issuing from a pond that is never dry, which soured or killed the grass when all flowing in its natural confined channel, over an extent of several acres,

by running channels on the brow of the hill so as to overflow or leak out on the lower side: wherever this water touches and flows off, the crop of hay is much increased.

Irrigation in this country seems to be but little understood and practised. There are many places where the water can be plashed over the fields where the proprietors have never thought of the great advantages resulting, but where a very trifling expense, judiciously applied would much increase the crops of hay and grass.

As the only practicable mode of bringing up the production of his farm—it being too distant and too expensive to purchase and bring manure from the stables of the city—he commenced rearing and keeping swine. For several years his common average number was one hundred and fifty. Every one who keeps swine will realize how great is the quantity of food consumed by a score or two of this voracious animal; that few of the largest vegetable and grain farms will produce enough to keep in growth so great a number. To keep up the number, Mr. P. resorted to the Boston market, and frequently purchased damaged grain and rice, the refuse ship bread from returned voyages, and other material to be found in the city: boxes of damaged raisins, with other injured imported fruits, were sometimes converted into thanksgiving food for the grunters. All the time the brutes were made workers for the benefit of the farm. When we contrast the indolence of our own half a dozen swine, which if hungry would much rather resort to some mischief, as the devouring of young chickens, or lie stupidly down when fed with a full belly, than perform any useful labor,—with the industry of Mr. Phinney's seventy five or hundred swine; we must admit that his hogs have much the better bringing up. His swamps and low grounds have furnished abundant materials for the hog pen: loads of black mud or muck are constantly lying on the outside to be thrown in and worked over by the nose of the hog as fast as it may be profitably added to the work already done. After it is thus worked, it is generally carried to the barn-yard to be trodden upon and mixed with the droppings of the cattle, or the daily collections in the winter of the stables, where the whole is accumulated in a mass fit to be applied in the spring of the year to every growing crop. The well arranged barns on these premises are so constructed that the urine of the cattle passes underneath into cellars where every thing is saved. The hogs are generally kept in small pens, with two apartments, one for the mud and the other as a place to rest upon a dry floor—they work, for the most part, either singly or in pairs; and it seems to be a part of their daily business to root and champ the fresh black mud that is thrown to them. And it is as much the business of the workmen to supply and take out of the pens, as it is periodically to milk the cows, or to sow and hoe for the crops.

WORKING HOGS.

Mr. Phinney's present number of working hogs is about seventy-five: he says he cannot afford to keep a number beyond this while Indian corn costs a dollar a bushel, and pork sells for only six cents. When pork sold for eight, ten, and twelve cents the pound, he did well, even when he had to purchase a portion of food for the keeping, to keep as high as the number of one hundred and fifty. He has accumulated by their means as many as five hundred full loads of the best of manure in a year; and he has made sales of pork to the amount of between two and three thousand dollars in a season.

CURE FOR THE MANGE AND QUINSY IN HOGS.

Messrs. Editors,—During my perigrinations through "Old Robertson," a few days since, in conversation with one of its most respectable and intelligent citizens, (and one of your subscribers, too,) I was informed of two sovereign remedies for two common diseases to which swine are liable, to wit: "Mange" and "Quinsy." If you have not already given to your many readers the same or other better remedies for the same diseases, you might do well to give them this, which I am assured has never failed, in many trials, to produce a perfect cure in a short time. The remedy for that most loathsome disease, mange, is simply this—take the common poke root, stalk and salad, and boil a quantity of it until the liquid becomes quite strong, then season with salt, meal, pot liquor, &c. until it is made palatable to the hog, and he will partake of it and the salad most bountifully. It has been observed, too, that if the hog has ticks on him, they all drop off after the first or second feed; but whether from getting the liquor on him, whilst feeding, or taking it inwardly, is not known. For the quinsy, give the hogs one or two *tea parties*—tea made strong of penny-royal, and seasoned, as the poke juice, with salt, meal, and pot liquor.

Very respectfully, one of your subscribers,

S.

We have long known that poke root was a valuable medicine for many diseases incident to domestic animals. We believe a strong tea of poke root, given frequently, will cure the malignant disease denominated *farcy*. It acts upon the skin and the absorbents, and "cleanses the blood."—*Agriculturist.*

For the Southern Planter.

Hanover Court House.

Mr. Editor,—That portion of our domestic

economy which we in Virginia neglect the most, is what I shall designate by the rather homely phrase, the "truck patch." It is true that we sometimes plant a few pumpkins in the corn-field, which, however, generally turn out but poorly, from future inattention, and sometimes you may see a few half starved, unthrifty turnips or beets, which have had the fortune, good or bad, I an doubtful which, to escape the clutches of the marauding pigs; but how rarely, how very rarely is it, that we see a large and well enclosed lot of fine and thrifty vegetables for the winter consumption of our cattle—unfortunate and neglected that they are! I have often thought with sorrow and with shame of the marked superiority which the inhabitants of New England have over us in this respect.—Why should it be so? Is it any excuse for us, that because we have more cattle, they should not fare so well as theirs? By no means; if we have more to feed we are able by care and attention to provide more food for their maintenance and comfort. We have more land—and it is susceptible of as high improvement. We have more labor, and it can be as profitably employed on our farms. But we have not the *habit* (for if we would but exert it we have the faculty) of attending to the minutiæ of a farm. We aim at a large, a *bragging* crop of corn and wheat, whilst we neglect, what I think the essentials of good management, the comfortable food and shelters for our cattle, the sheds for our implements of husbandry, our fences, and the other thousand and one petty details, the neglect of which is absolutely incompatible with good farming.

But to return to the "truck patch." The size of it must of course bear relation to the quantity of stock which you have to provide for; but the larger and richer it is, the more corn one will save in the fattening of his hogs; the more comforts he will bestow on his horned cattle, and, what is to many of more importance, on *himself;* for there are many amongst us, who, though they don't care a straw how their poor starving, freezing cattle look, may be actuated by the desire of having good butter and milk, to pay this little attention to their comfort. I should recommend pumpkins to be cultivated for use in the early part of the winter. The roots, which I would plant, are the mangel wurtzel, the carrot, the parsnip, and the ruta-baga. These, as they will keep much longer than the pumpkins, I should leave untouched, until all of the latter were consumed. The common turnip I do not look upon as near so valuable as any of those roots which I have enumerated, being much more watery, and being possessed of much less nutritious matter. The Jerusalem artichoke has some merit on account of its great product, and the little labor which its cultivation requires; but that is also too succulent and too little nutritious to allow much value to be attached to it. The four kinds of roots that I have mentioned above I consider far better than any others that we can plant. In addition to the great quantity of nutriment which it contains, the ruta-baga has the recommendation of being sown much later than any of the others, which is desirable, because, if any of those which are first sown should not come up, the ruta-baga can be sown where they have failed. The best mode of feeding away these vegetables is to chop them up, boil and give them to the cattle while warm.

I feel confident, Mr. Editor, that any one who will once try this mode of providing for his cattle, during the winter, will find himself so well repaid for his attention and labor, that he will never abandon it. With renewed wishes for the prosperity of the Southern Planter,

I am, your obedient servant, X.

December, 1841.

For the Southern Planter.

Caroline County, Nov. 16, 1841.

Dear Sir,—In your Southern Planter of this month, page 184, I find a request is made for any person to vouch, that layers of elder twigs will prevent rats from destroying oats in the sheaf. I saw a publication some two or three years ago, (I do not recollect where) recommending the elder as a preventive against the ravages of rats in oats; having suffered so much loss by them, I was induced to try the remedy proposed; I was at much trouble to procure the elder, and took great pains to give the experiment a fair trial; but to my regret, I found it a total failure; the rats trespassed as usual, and my horses and cattle never ate them with their usual eagerness. I am under the impression the elder imparted a taste or smell that was offensive to them.

I am much pleased with your periodical: although I can't be called a farmer, I feel deeply interested in the advancement of that branch of business, and hope, ere long, the farmers in this county will form societies, as some of the adjoining counties have done, for the advancement of agriculture, thereby benefitting themselves, and encouraging your laudable efforts manifested in your monthly communications.

Respectfully, yours,

Wm. G. Maury.

The refutation of error, though more invidious, is not less useful than the establishment of truth. We return our sincere thanks to Mr. Maury for the manly promptitude with which he has advanced to save others from an useless and injurious experiment. We believe that thousands of the recommendations of new practi-

ces, that are going the rounds of our agricultural papers, belong to the same category with the elder leaves. We take pains in making our selections to avoid such as seem to want the stamp of truth; for we believe it is better to fail to publish two good things, than to propagate one bad one.

MANURING.

The system of spreading refuse vegetable matter over the surface of land, instead of hauling it into the farm pen to be trampled by cattle, is finding much favor in public estimation. Among its advocates, we reckon not the least able, Mr. Drummond, the author of the following communication. We invite particular attention to his views; they in a great degree correspond with, and confirm, those of "W.W." in a former No. of the Planter.

For the Southern Planter.

MANURING THE YEAR BEFORE TILLAGE.

I have for many years been in the custom of spreading a portion of my manures on the surface of some field which was to be cultivated the year following, and have never failed to be gratified at the result. When I speak of manuring the year previous to tillage, I mean a year before the usual time; i. e. spreading now, and during the winter and next spring, on land which is to be cultivated in the year 1843.

I have already spread on my field to be cultivated in corn in 1843, some refuse straw and chaff, compost, saw-dust and mould, scrapings about negroes' houses, rotten leaves, and pulverized charcoal and cinders from a blacksmith's shop; and shall through the winter continue to *spread the like.* Refuse hay, weeds, chips, shavings, saw-dust, and tobacco trash are all very good, and should never be moved to the farm pen, that we may have the trouble of moving them out again. The hog pens, however, should be liberally littered, for which purpose leaves are best; but if these cannot be had abundantly, then other trashy matter should be used.

Next spring I intend all the long manure of the horse, cattle and hay yards, to go on the cornfield intended for 1843. Of course, the decomposed and pulverized manures, will go on gardens and meadows; and of course, my cornfield of 1842, gets no manure. So soon as the weather is sufficiently warm to cause evaporation, (which is usually about the first of April) I intend to sow plaster on all the manures then spread, and follow with the same immediately after every future spreading. The plaster is expected to intercept and retain the ammoniæ, as it issues from the manure, and which would otherwise become aerial, and future rains to carry it into the earth; and this, together with the protective coat, is expected to grow a splendid crop of grass; and altogether, to make the land permanently rich.

My hilly lands are kept mostly in small grain and pasturage, and my bottoms, except for meadows, are kept in corn, small grain, and used without grazing, except partially in the fall and beginning of winter; which system I am satisfied with, and shall continue it unless convinced of my error. The ground allotted to corn will, as above stated, be manured the year before tillage, fallowed in fall or winter, raked and planted in the spring, the crop tilled by the cultivator, so as not to lift the grass seeds to the surface, fallowed again the next fall or spring for a crop of small grain, when the grain and grass will all start together. So soon as the small grain is harvested, the field is again ready for the manure and plaster, and the third year is rest for the land, and jubilee for the sheep and calves, or cows and hogs if you please, from August till the fallow is finished.

My ground intended for corn in 1843, is now well taken in white and red clover, and in spring is expected to make a handsome show of spear grasses; the seeds of all which were either previously on the land or carried with the manure which was spread for the corn crop. For this purpose, the clovers are far preferable to all others. Before dismissing this part of my subject, I would remark, that it might be well to be cautious in pasturing stock sheep on highly dunged land, as I am inclined to think this is at least one of the generative principles of rot.

Let us now compare the customary mode of moving and applying manure with my proposition. As to manuring in the hill, or on the planted and growing crop, it is out of the question. Broadcast and before the fallow for planting, is the only method for a substantial Southern Planter. If the land to be planted is clay, it must be ploughed in fall or winter, for the purpose of exposing it to the frosts; that, thereby, it may become pulverized. And if infested with worms, or other pestiferous insects, although sandy or otherwise porous, it must be ploughed in the same season, for their destruction. If the agriculturist has on hand the wanted quantity of manure, he must start his carts to moving it out in March, and perhaps continue through April; and whether his field has already been ploughed or not, by the time the job is done, it is badly potched, by the treading of the wheels and teams. If the ground has been ploughed, it must be ploughed again, for the purpose of turning down the manure; and this is double work and cloddy to boot; nay worse, for the team and ploughman have a tough job in getting through the trodden earth, and tangled corn-stalks, and straw: and if it has not

been ploughed, the last mentioned objections are equally applicable.

My mode is to get out the manure at my leisure,—the sooner the better—but if by June not much difference; and if the land should be potched in so doing, not much difference for this either, for the covering matter will prevent the land from baking, and the growing roots will open the pores anew.

Unfermented dung when applied directly to growing vegetables begets rust and other diseases; and if these be eaten by man or beast, they have a deleterious effect: but if instead of converting these vegetables into food they are ploughed down for manure, the deleterious quality must by decomposition, be thoroughly dissipated. Colonel Taylor has justly remarked, that "the earth will no more bear gorging with dung, than the stomach of man with food," and I say that disease will as certainly follow the one practice as the other. A weakly constitution, and poor land, will bear less; and a robust constitution, and rich land, will bear more food.

The custom is to spread the manure, plough it down, and plant immediately; by which process poor earth is brought to the surface, consequently the crop takes a wretched start, the puny roots presently enter and feast on the rich dung, which gorges the plant, and disease is the consequence. By my proposed practice, the ammoniæ, or essence of the manure, has time to sink six or eight inches before the fallow plough shall again lift it to the surface, when and where it is ready for immediate and congenial action on the young plants; and the coarse manure which shall be turned under, will, with the aid of industry, produce a bountiful and nutritious crop. ZA. DRUMMOND.

Amherst, Nov. 1841.

We return our thanks to Col. Isbell for the promptitude with which he has furnished the following reply to the inquiries in our last.

Willow Banks, Nov. 29th, 1841.

Dear Sir—My attention has been called to the publication, in the November No. of your paper, of a letter addressed by me to Doctor N. M. Osborne, in which a brief outline of my mode of cultivating corn, is given; and in compliance with your request I take pleasure in furnishing you with a more detailed statement of that method.

To carry out my plan, I am careful, in fallowing, to turn under all vegetable matter on the land, and let it remain so during the season of the corn crop. Before planting I harrow with light harrows, then lay off the rows with a small trowel-hoe plough, not cutting more than two inches, so as not to turn up the turf, having the rows on common high land, 5 feet 3 inches wide, and 2 feet 3 inches in the drill. On low, wet land, the distances might be lessened. I then plant early and cultivate quick, running single straight tooth harrows, with seven teeth in each, the frame in the form of Y. This is the kind of harrow I have used, though upon maturer reflection I am inclined to the opinion, that a harrow with nine teeth would be better, so as to run only twice in each row, and at the same time cutting the top of the land more than one with seven teeth. I harrow four or five times, and hoe two or three times, according to circumstances, drawing up but little earth to the stalk.

The result of this kind of cultivation is, that the land not only remains light throughout the season, but the vegetable matter beneath, continually decomposing, is as continually furnishing the young corn with nutriment, so that the crop when maturing is as well or better supplied with manure than at any other stage of its existence, and hence is protected, in a great degree, from burning, which generally happens when the stalk has exhausted the strength of the land about it. And here you will discover the reasons for my preferring the spring fallow. By fallowing in the spring, much less vegetation springs up, so I have much less difficulty in destroying the grass with my harrows and hoes. Another reason is, that in the spring fallow, the turf, or other vegetable substances, are undergoing a state of decomposition throughout the growing and maturing of the crop, while with a fall fallow, this decomposing would cease long before the crop could be matured.

The most plausible objection raised against the method practised upon by me, is, that it increases the labor with the hoe. It is true I now have more laborers at the hoe than formerly, but it is attributable to the fact that after the corn is planted it requires fewer hands to harrow than to plough, so it is only a transfer of labor from the plough to the hoe. I will not undertake to say that mine is a labor saving plan, but I am fully convinced it is a land saving plan, for since I commenced the system I have never discovered the least disposition in the land to be washed by summer rains, although hilly and of a light sandy loam. This method, contemplating as it does the cultivation of land with as smooth a surface as practicable, leaves the field in excellent condition for the succeeding wheat crop, it not only being very light, but when ploughed for wheat turns up the decomposed sod, which presents the field with the appearance of a fine top-dress. As to the quantity produced by this mode of cultivating and those heretofore used by me, I discover no difference. Cultivating on the four field system, and grazing lightly, is, of course, in furtherance of the plan proposed by me.

Respectf'ly, yr's, &c. JAS. ISBELL.

For the Southern Planter.

Taylorsville, Nov. 1841.

Mr. Editor,—Of all known vegetables, that which I think would most amply repay the Virginia farmer for the trouble of cultivation, is the Irish potato, (*solanum tuberosum.*) The potato is a native of America, and was carried from the colony of Virginia to England about the year 1640, where it was soon eagerly seized upon as a valuable addition to their rural economy, and now, as is generally known, forms the main source from which the poorer classes of the whole kingdom, but particularly of Ireland, draw their means of subsistence. The cheapness and simplicity of its cultivation, its great product, and the fact that it is probably the most nutritious vegetable that we can cultivate, should cause the potato to be highly esteemed, and should induce our farmers generally to plant it extensively, with the view of its forming a most valuable article of food and comfort for the negro race. Much might be said on the many different methods of cultivating this most valuable plant, but were I to enter into a minute account of the culture of the potato, I should trespass too greatly on your columns; I shall therefore confine myself to a brief description of that which I conceive to be the best.

Having first properly prepared the land in which you intend to plant your potatoes by ploughing, (or spading if it is but a small crop) and raking it, and carefully removing with the hand all roots of grass or weeds, that the rakes have failed to carry off, lay it off with furrows of from two feet to two feet and a half apart; in these furrows put a considerable quantity of manure from the stable yard, and immediately upon that place your bits of potato, which should be quite large, not cutting your potatoes into more than two pieces when small, nor into more than four parts when large, unless they are of very great size: then cover them with from three to four inches of earth. When the young plants are regularly up, weed them, throw a little earth around them, and re-plant where they may be missing. They will require a second working about six weeks afterwards; at which time you should hill them up considerably. A third working is necessary about the time that the flowers of the plant begin to make their appearance; they should be entirely freed from all weeds, and a large quantity of fresh earth placed about the plants at this time of working. It will be unnecessary to disturb them again after the third working, if it is properly executed.—About the 1st of September, after the vines are entirely dead, dig your potatoes and place them in a dry cellar, where there is no possibility of their freezing, and they will keep readily until late in the ensuing spring.

There are many fine varieties of the potato; but for the purpose which I have indicated above, I think the Rohan best suited; for, although it wants the delicious flavor of the Mercer, and other good varieties, yet I think it greatly preferable to them on account of its wonderfully great yield. I think it better to change the stock of your potatoes once in every three or four years, which, by the way, I conceive to be the case in regard to almost all plants that we cultivate.

A small quantity of potatoes should be planted during the first mild weather after the middle of February, for the summer consumption, but the fall crop should not be planted until the last of March, or first of April.

With the sincerest wishes, sir, that the Planter may meet with the success which it so richly merits, I am, your obedient servant, X.

The Editor of the Southern Planter will much oblige "A Naturalist," by correcting the following errors that appear in his two last communications:

At page 197, for "Sarvacænia Flara," read "Sarracenia Flava."

At page 216, the 5th word of the 12th line from the top of the 1st column, should be "which" instead of "and."

At the same page, the 2d word of the 25th line from the top of the 1st column should be "such" instead of "rough."

At the same page, the 7th word of the 24th line, from the bottom of the 1st column should be "quantities" instead of "quantity."

At the same page, the word "chygroscopicete," in a parenthesis, of the 2d column should be "hygroscopiceté."

POULTRY.

"When," says M. Bosse, "it is wished to have eggs during the cold season, even in the dead of winter, it is necessary to make the fowls roost over an oven, in a stable, in a shed where many cattle are kept, or to erect a stove in the fowl house on purpose. By such methods, the farmers of Auge have chickens fit for the table in the month of April, a period when they are only beginning to be hatched in the farms around Paris, although further to the south. It would be desirable that stoves in fowl houses were more commonly known near great towns, where luxury grudges no expense for the convenience of having fresh eggs." It is worthy of remark, that the Irish peasantry, whose poultry occupy at night a corner of the cabin, along with the cow, pig and the family, frequently lay very early, in consequence of the warmth of their night quarters; and there can be no doubt that this is the chief secret for having new laid eggs in winter, paying at the same time due attention

to protect the hens from wet, and to have them young, or at least early in moulting.—*From the Poultry Yard, by Peter Roswell.*

BARRETT'S GARLIC MACHINE.

The Editor of the Southern Planter, in speaking of our notice of this machine, remarks:

"If the machine is all that it is described to be, the inventor will obtain a suitable reward for his ingenuity in bringing it to this market [Richmond, Va.] Our millers are proverbially enterprising and liberal."

We most cheerfully concede to the millers of Richmond, all that is claimed for them by the Editor of the Planter, on the score of enterprise and liberality—the high standard to which they have brought their flour is indubitable proof of the possession of the first quality, and their location is as pleasing an evidence that they enjoy the latter. And while we make these concessions, we will remark, that *Barrett's Garlic Machine* from its intrinsic value, is eminently entitled to every thing we said in its favor, and that before we ventured to speak in its praise, after having examined it, being pleased with the principles of its construction, we visited Mr. Weirman's mill, where one had been many months in practical use, under a skilful miller, and there satisfied ourself fully of its utility. Thus confirmed in our good opinion of the machine, and of its worth, we felt it to be our duty to say what we did, and we are confident, that if any of the millers of Richmond were to try it, its use there would become as extensive as the flouring mills themselves, for no miller of correct judgment, after seeing one in operation, would rest until he had added it to the other appointments of his mill. It is, in fact, one of those machines, whose simplicity and economy cannot fail to commend it to any careful observer.

American Farmer.

In this handsome tribute to the millers of Richmond, no more is said than is due generally to the millers of Virginia. We are authorised to say that any substantial improvement in the manufacture of flour needs only to be presented to the millers of our State to be properly appreciated, and suitably rewarded.

CLAY MIXTURE ON SANDY LAND.

A correspondent of the Western Farmer gives the following as his experience of the value of mixed clay with sandy soil:—Several years since, when a resident of New England I purchased a piece of dry sandy land, denominated there, "pine plains," that had been very much worn. A portion of it, about 1¾ acres, was on the verge of a deep ravine, and a little more elevated than the remainder of the lot. This piece had been sown the fall previous to rye, and stocked to clover. The rye was harvested—an inferior crop—and the ground, I found in the fall, was, not to appearance, more than half stocked. Not having manure for a spring crop, and clay being handy, I carted on to the piece about thirty ox-loads of clay; this, however, was not pure, but supposed to contain one-third sand; the same was spread upon the surface of the ground in the fall. In the spring it had formed a complete coating over the whole surface; the result was a heavy crop of clover. The next spring about twenty loads of yard manure was spread upon it. It was then broken up, rolled, harrowed and planted to corn, about the 10th of May. The result was, about *ninety bushels of sound corn.* I had corn enough for my own use and sold about fifty bushels for fifty dollars. This was my first experiment in farming. It is nearly eight years since the clay was applied, and I am told the ground is still benefitted by it. The application was continued on other portions of the lot with equally beneficial results as long as I occupied it.

TOBACCO.

We published some time since a communication to the Farmers' Register in support of a practice said to be common with Mr. William Old, of Powhatan, of cultivating two lots alternately in oats and tobacco; the oats being turned in as an improver. The celebrity of the gentleman alluded to has, we find, excited great interest in the communication. We therefore feel bound to say that a correspondent of the same paper signing himself A. M. H. objects to the practice, and recommends in its stead a three-field system in which clover shall take the place of oats: he says:

"I consider that clover, on account of its early protection to land from sun and evaporation, as well as its fertilizing properties, has no equal as a lay. Oats, maturing rapidly, with an exhausting crop of seed, and drying up at once, cannot be so considered; and if turned under at maturity, as they must be to produce the most fertilizing effect, a naked fallow is exposed to the injurious influence of the sun at the hottest season of summer."

PRESERVATION OF BUTTER.

At a late council of the Royal Agricultural Society of England, a jar of butter was received from Henry Wood, Esq. as a specimen of the

successful mode adopted for its preservation when that article is intended for export to foreign climates.

Mr. Wood informed the council that this butter had been prepared on the 19th instant, (June,) according to the process adopted in eastern countries, where it was used for culinary purposes instead of hog's lard, which the Mahometan law prohibited, and would keep for any length of time in a perfect state of preservation, although it contained no salt or other additional substance. This preservative state of the butter was induced by the removal of scum, and the dissipation of the watery particles of fresh butter, effected by the gentlest possible application of sufficient heat to produce the result. Mr. Wood stated that in Asia this gentle heat was obtained by the natives by filling a large open earthenware pan with powdered and well dried cow-dung, and then setting fire to it, introducing into the midst of the burning cow-dung an earthen vessel containing the butter, which thus became melted; and when the scum, as it rose, had been successively removed, and the watery particles driven off by the heat, it was poured into a jar and preserved for use. Mr. Wood suggested that a sand-bath, properly regulated, might answer the same purpose as the dried cow-dung, and, as the process was so very simple, there could be no difficulty in preparing it; and that, when once prepared, the butter never became tainted. Mr. Wood stated that he carried with him to the Cape of Good Hope some butter prepared in the same way, a year previously, and which was there pronounced to be superior to the salted butter of the colony, and for culinary purposes far superior to lard.

A NEW INVENTION.

The Newark Daily Advertiser notices, with high commendation, a new and ingenious invention, the production of the ingenuity of a citizen of that place, Mr. Levi Bissell. It is a substitute for the ordinary car and carriage springs now in use, the elasticity and spring being produced by atmospheric air condensed in a cylinder, somewhat resembling that of a small steam engine, made air tight at one end, with a piston working in the other. Four of these springs have been in use in one of the cars on the New Jersey Railroad for some months past—the whole weight of the body being supported by the four columns of condensed air in the cylinders—and we believe with universal satisfaction. Passengers readily detect the difference between that and the other cars by the superior ease and comfort of its motion. It is stated, by those who have had the fullest opportunities for observing, that over the roughest and most uneven places, where the inequalities of the track render the jar exceedingly disagreeable with steel springs, the air springs make the motion perfectly easy, so that a passenger may even read with comfort while riding.

MENDING STEEL PENS.

But few people are aware of the fact, that ordinary steel pens may be made to perform at least four times their usual service, as easily and with as little trouble as that of mending a common quill pen. The steel pen usually fails in the first instance, by having the corners of its point worn off, which prevents the ink from readily taking to the paper. This may be usually corrected in a minute or less by means of a fine flat file, such as is used by watchmakers, and may be procured for a shilling. Hold the file in a horizontal position, or let it lie on the table, with its point from you. Then place the point of the pen on the point of the file, holding the pen in a vertical position with its back a little inclined towards you: draw the file towards you, gently pressing the file. Repeat this two or three times as the case may require. Then hold the pen nearly in a horizontal position with its point from you, and with one side of its nib resting on the file, draw the pen towards you, repeating the operation with both sides of the nib, till by trying it with ink you find it sufficiently pointed. A small magnifying glass is convenient in this case, but the operation may be very well performed without it.—*N. Y. Mechanic.*

CHEMISTRY.

When butter is to be made, if a little old butter be put into the cream, the butter will come from much less churning. When soap is to be made, if a little old soap be put into the lie and grease, the soap will be made with considerable less boiling.—*Farmer and Gardener.*

We have been favored with a copy of the address delivered by Mr. James M. Garnett before the Fredericksburg Agricultural Society. Mr. Garnett is too well known as an agricultural writer to require an introduction from us. Without pretending to preserve the beauties of his style, we will endeavor to do all that our limits, in any case, permit, to give a condensed view of the practical results at which this eminent gentleman has arrived.

First, Mr. Garnett is fully satisfied that neither the Brown corn nor the Dutton, so celebrated at the North, are suited to our climate.

Secondly, that corn should always be succored, because experience has satisfied him that this process renders it more impervious to a

drought, and that in a large majority of years we are visited with a dry season. The twin corn, which, he says is not to be confounded with the Baden, he prefers to any other.

Mr. Garnett recommends the following mode of cultivating potatoes, of which he has heard others speak very highly, but which he has not yet had an opportunity to try:

"First plant them, either whole or cut, in well prepared earth, about fifteen inches each way, and three inches deep. Then cover them eight or ten inches deep, with pine leaves—if you can get them—if not, with straw or refuse hay. When fit for use, take them from under cover without disturbing it any more than can be avoided. This practice is followed by many; but the improvement consists in leaving enough potatoes under the same cover, in the fall, to produce a second crop the next year, which they will do, much earlier than you can procure them by any other process."

Of the different varieties of turnips, Mr. Garnett prefers Sinclair's white flat, for the product, and the Scotch Aberdeen, for the flavor. Concerning Mr. Garnett's favorite, the Guinea-grass, we make the following extract:

"Before I quit the subject of experiments, I will once more offer you a brief notice of the Guinea-grass. The experience of the past season has confirmed me in the belief, that it is probably the very best grass we can cultivate in our high, dry soils, especially such as are rather sandy than stiff. Indeed, I believe, that from latitude 39, as far south as our Government extends, it would prove our surest reliance as green food for horses and cattle—particularly during seasons of great drought. My reason for thinking so is, that mine has been twice subjected, since I first planted the roots, to this severe test, and on both occasions has remained green, while all the other plants on the farm were suffering extremely. It has both a fibrous and tuberous root, it will grow in ordinary land, to the height of five or six feet, and will bear cutting three or four times, during the season, at an average height of at least three feet, which no other grass will do, of which I have any knowledge. After the first year, during which it requires some cultivation, the growth soon thickens so as to smother all other plants that may spring up amongst it; and it is now so acclimated as to spread, not only from its roots, but its seeds, a large proportion of which now ripen with us, although it is still safest to propagate it from the roots. These will bear transportation for several weeks, without losing their vitality, if wrapt up either in cotton, tow, moss, or soft paper. They may then be buried in the earth, until the season for planting, which is as early as the earth ceases to freeze hard. The roots should be cut into pieces an inch or two long, then buried about three inches deep, five or six inches apart one way, and twelve inches apart the other. Two or three workings with the hand hoe, during the first year, will amply suffice to insure their thriving, after which they require no more labor but to cut the growth for use."

Mr. Garnett well urges the established doctrine, that the highest cultivation yields the greatest nett profits, and that the best investment that a farmer can make of his money, is to "lend it to his land." On this subject we make the following extract:

"Of this I could give you innumerable proofs, but let three suffice for the present. In an excellent address by John Sanford, Esq, President of the Onondaga Agricultural Society, which he was lately so kind as to send me, there is the following statement of the capacity for improvement of the lands in that part of New York. He says—'In our State 53 bushels of wheat, 58 of barley, 50 of peas, 132 of oats, 135 of corn, 750 of potatoes, and 5 tons of hay, have been grown per acre. In 1837, I grew, (says he,) 1,400 bushels of potatoes on 3 acres, rutabaga 1,000, mangel wurtzel 1,150, carrots 1,200, and sugar-beet at the rate of 2,100 bushels per acre, making 6,000 bushels; and in 1838, I cut 40 tons of clover and herds-grass from 10 acres.' This proof is taken from New York; and now for the two within my own knowledge. The first is, that several years ago, I knew 103 bushels of wheat and a fraction, to be made from only two acres of land, manured from the cow-pens, and this too, in the county of Stafford, which is as remarkable for poverty of soil as almost any in Virginia. And in my own county, I have known 30 bushels of wheat—at the rate of 504 bushels of Irish potatoes per acre, and 75 bushels of corn per acre, to be made from a soil similar to that which was within a hundred yards of it, but unmanured, and which produced barely 15 bushels. Here was an increase of more than fourfold, at no other additional expense than carting out and applying the manure made on the farm, to land which had certainly been cleared more than seventy years. I could state many more cases of still greater products, but deem it needless, as this suffices to prove an increase of more than four hundred per cent.—which far exceeds any shaving that I have ever yet heard of."

An error prevails very extensively, says Mr. Garnett, that rye and oats exhaust land more than wheat; whilst the experiments of the ce-

lebrated Dr. Von Thayer satisfactorily established the fact, that whilst wheat exhausts the fertility of land in the proportion 4 per cent. per bushel of product, rye exhausts in that of $3\frac{1}{4}$, barley of $2\frac{1}{4}$, and oats of only $1\frac{6}{10}$.

We happen to know something of the zeal and devotion with which Mr. Garnett has nursed the little Society of which he has so long been the President; and if they attain that degree of celebrity and usefulness, that we are happy to hear may be presaged from the success of their last meeting, not only for that, but for their very existence, will they be indebted to the fostering care of JAMES M. GARNETT.

REMEDY FOR FILM IN THE EYE OF A BEAST.

A correspondent of the Yankee Farmer, suggests what he considers a new remedy for a film, produced by a blow or other accidental causes of a similar nature, *i. e.* spitting *tobacco juice* into the eye of the animal. He remarks, that he has seen it tried only twice, but each time with entire success; and with very sensible caution concludes, by saying "the remedy requires to be more fully established." We can assure our cautious friend, that the remedy has been fully established down South for years. The memories of our oldest tobacco chewers reach not the antiquity of its discovery. We have often seen tobacco juice spit in a horse's eye when weeping or looking weak, and entire relief afforded.

Temperance Advocate.

MR. CLAY ON HOGS.

We have been kindly furnished with the following extract from a letter, written by the Hon. Henry Clay to a gentleman in this vicinity, upon the subject of raising hogs. Mr. Clay's agricultural reputation is hardly inferior to his political celebrity.

"You inquire about hogs. The best race, I think, is the Berkshire; put your boars to the sows in the first week of December, regulating the number by the number you want for the pen, averaging five pigs to the sow. Your pigs will all come about the same time, early in April: about the 10th of May, when they can crack corn, have the sows all spayed and the boars altered. They will form the best part of your pen of killing hogs the ensuing fall. Select your boars and sows from the April pigs to produce another year—keep them apart until the first week in December, and then put them together, &c. That is the whole system, except that you should always remember, that no one of the domestic animals should ever suffer for food, from the time it comes among us, until it fulfils its final destination. Starving never succeeds with man or beast."

VALUE OF ASHES.

Professor Jackson, in one of his lectures in Boston, in illustrating the manner in which soils might be rendered fertile, said that: "A farm within his knowledge of blowing sand, a pine barren, and almost hopeless, on which ten bushels of corn to an acre, could scarcely be grown, by the judicious application of ashes, had been made to produce forty or fifty bushels to the acre." We do not question the correctness of Dr. Jackson's statements. Our observation has convinced us that on sandy soils, with the exception of clay marl, there is nothing more beneficial in the application to such soils than ashes; and, very fortunately, unless uncommon quantities of acid exist in such soils, leached ashes are nearly as beneficial as unleached ones. Ashes do what lime cannot; they render the soil more tenacious of moisture; and, although their action is not as prompt or efficient on cold, sour soils, they are, for the reason assigned, considered as valuable on light, sandy ones. Of this fact the farmers on the light soils of Long Island and New Jersey are well aware, and in the gathering and application of ashes find a certain source of profit.

Philadelphia Saturday Courier.

GOVERNOR HILL'S ADDRESS.

Of all the pursuits of life, we hold the occupation of the farmer, followed as it is, under the blue vault and in the open air of heaven, to be not only the most enticing, but the most redolent of health and happiness. We, therefore, most heartily subscribe to the following forcible extract from an address of the Hon. Isaac Hill, delivered before the Agricultural Society of Kennebeck:

"No men are generally better qualified or more discreet and safe agents for executing the various purposes of civil government, than the intelligent farmers of our country towns. For the last thirty years I have been conversant with much public business of a State and of the nation: I have known men of no occupation more trustworthy or more able so far as related to all the practical uses of government, than farmers who have left the plough for one or more weeks or months in a year to take seats in the Legislature, or manage the prudential concerns of a town, or administer upon estates, or even sit as judges in causes for trial. Rarely

will it be found that the well-informed man who has spent a portion of his time in public life—who has gone his round as a state legislator or even left his farm and his family to occupy a seat in Congress, who does not return to the labor of his farm, if he have been successful in that pursuit, with an appetite increased for a more zealous devotion to his occupation. I have myself been more or less in public life for twenty years—I have spent the time of several successive sessions by the side of some of the most talented and conspicuous men of the country in that desirable position, the Senate of the United States, and I have in succeeding years sat at the head of the councils of the State; but better and more satisfactory would have been the employment, had my constitution and education admitted the exercise, to have labored on land which I knew to belong to me, and on which I had the satisfaction of witnessing a growing annual production profitably increased by my personal efforts. I have in fact gladly retreated from a public position when my services might be dispensed with to do such work in the garden or field as I know how to perform.

"Let the soldier exult in the pomp of war,
The king in his self-throned hall;
The free-born farmer is happier far
Than kings, and lords, and all.
His are no fields with carnage red,
And drenched with blood of the slain,
But hills and vales, o'er which is spread
A harvest of waving grain."

PLASTER.

The Editor of the American Farmer says:

"Our own experience has taught us, that plaster can only be applied with decided advantage on soils naturally dry, or made so by draining; that there, when judiciously used, it is of immense value upon corn and clover, and that it always acts most powerfully upon ground previously limed."

COB CRUSHER.

We are glad to find, from the inquiries made for it, that this article is getting into general demand. We were shown to-day a very substantial machine, made at the foundry of D. I. Burr & Co. in this city, which will not exceed the price of $20, all complete, ready for connexion with the shaft of an ordinary mill. The article is extremely simple, and we should imagine perfectly efficient to crush the cob preparatory to its being reduced to meal between a pair of stones. Mr. Burr assures us that he has sold upwards of an hundred, and, notwithstanding the lowness of the price, never heard a complaint of one of them. We can answer for the general style of mechanical execution in this establishment. We do not believe it is surpassed in the Union.

To the *cash* system, adopted by our friends, is the cheapness of this article, in part, attributable.

STOCK FARM.

Our attention was called a few days since to a splendid lot of sheep on their way to the stock farm of Capt. John B. Coles, of Nelson. We learn that this enterprising gentleman has lately made arrangements for going largely into the stock business for which we understand his location is admirably adapted. The sheep to which we referred consisted of Bakewells and Southdowns. We heard an offer of fifty dollars a piece for the Bakewells refused before they left our wharves. We have not the smallest doubt of the success of the enterprise.

BUTTER.

Although deficient in many points of good husbandry, Normandy has always been remarkable for her butter. The cattle, to appearance indifferent, afford a constant supply of cream, that is churned into the most delightful butter at all seasons of the year. The yield is not abundant, but more remarkable for quality than quantity. The butter is described as being of a "marrowy consistence," very superior to any thing known in England, neither hard in winter, nor soft in summer. Something of this is no doubt attributable to a peculiarity in their breed of cattle, but much, we suspect, is also owing to the very want of thrift, of which they are accused, and, in spite of which, it is said their cows yield this delightful butter. We are told that they are ignorant of roots, and that their pastures are by no means luxuriant. Now, we believe that a feed of dry hay, with short pasturage, is exactly the kind to afford butter of a "marrowy consistence," and of the most delightful flavor; and we believe, moreover, that this extraordinary *quality* will only be obtained at the expense of *quantity*.

We see that Mr. Biddle furnished the dinner of the Philadelphia Agricultural Society, a few days since, with some butter, the produce of his Guernsey cow, which, even in that butter region, attracted great attention.

This cow, although described as little else than a bag of bones, took the premium at the

show without difficulty, on account of the extraordinary quality of her milk. The characteristic "consistency" appeared in all its richness, and we are inclined to believe this importation a great acquisition to the stock of the country.

We once knew a little red cow whose appearance might have commanded, possibly, *ten dollars*—she gave regularly, when well attended to, about six quarts a day, throughout the year; but of those six quarts very nearly three were pure cream, and from that cream, was made the most delightful butter we ever tasted, with all the boasted "consistency" of the Guernsey breed; but alas! our little favorite was not *imported*, and lived and died without ever dreaming of the possibility of her taking a premium at an agricultural show.

VACCINATION.

It appears that Dr. Creely, a surgeon in Aylesbury, England, has lately made the discovery, that the cow pox is nothing but the small pox in the cow, and that the disease may be communicated at pleasure to the animal by innoculating her with the virus of the small pox.

We presume that he considers small pox as the original disease, communicated accidentally to the cow, in whose system the poison is deprived of its worst properties, and reduced to the quality of vaccine.

This discovery is important, because it affords a means of obtaining vaccine matter, at all times when it is required, without depending upon the dubious operations of nature or climate.

LUCERNE.

The following directions for cultivating this valuable crop are at the same time more precise and better adapted to our climate and soil than any that we have met with. They are taken from the South Carolina Temperance Advocate, a paper, by the by, which we would recommend very highly to all of our readers, especially such as unite a love of temperance with devotion to agriculture.

For the Advocate.

Mr. Editor,—A friend of mine, at my request, drew up the following statement of the value and mode of cultivation of lucerne, in the management of which, he has been very successful. Though not intended for publication, it may be acceptable to some of your agricultural readers, who will, of course, modify his directions as to time of sowing, &c. to suit their respective locations. The writer lives in the hilly part of North Carolina, on a stiff soil of red clay.

A SUBSCRIBER.

LUCERNE.

Dr. Darlington describes grass as "having a cylindrical jointed stem, with the joints solid, and the intervening portions hollow, or, in a few instances, filled with a pith-like substance—the leaves alternate, one originating at each joint, embracing the stem with its base, and forming a sheath which is slit on one side down to its origin, and the flowers protected by those peculiar envelopes known by the name of *chaff*." Every such plant, he assures us, is a '*true grass*.' This description includes Indian corn, broom corn, sugar cane, wheat, &c. while it excludes lucerne and clover. Whether lucerne be entitled to the denomination of a grass or not, it yields to none of them for soil feeding; and besides being more productive and long-lived, as well as more palatable to horses and cows, than red clover, it is free from its salivating quality. In seven years, I have cut thirty-five heavy crops of lucerne from one seeding, averaging five crops a year. The largest number of crops any one year, was seven, the smallest, four. Manure was applied once only during the time, and then as a top dressing. The soil was a deep red clay, made light by deep ploughing and manure.

Lucerne has a strong tap roop, penetrating to a great depth. Hence the necessity of deep spading or ploughing. I have cultivated it only on upland; and don't doubt it will do well on any good corn land.

I have tried drilling and broad-cast, and much prefer the latter; first, because the number of plants being much greater, the yield is greater; secondly, because the labor of cultivation is saved. Some suppose that without annual culture with the plough or hoe, the plant must lose its vigor, and be overpowered by weeds and grass. Such is not the result of my experience. I have eradicated blue grass—the enemy most to be dreaded—by coultering, and cross coultering, harrowing and cross harrowing, until every root of the blue grass is torn up, and the surface of the ground completely pulverised, and then raking off the blue grass. This is to be done in the winter, once in three years, and a good top-dressing of rich manure should follow. I have used ashes and stable manure, separately and combined. The two combined, have given the best product.

PREPARATION OF THE GROUND.

Plough or spade deeply; pulverise completely; manure richly. Break up the ground in the fall, and the winter frosts will mellow it.

QUANTITY OF SEED TO THE ACRE.

If the seed be very good, the season very favorable, and the sowing done in the best manner, two gallons may suffice; but under any circumstances I would sow twice that quantity.

TIME OF SOWING.

Lucerne, like clover, if sown in the fall, will survive a moderate winter, and be destroyed by a severe one. I prefer sowing in September nevertheless, and running the risk. Should it survive the winter, it will give several good crops the ensuing year. Should it be destroyed, the ground is in fine condition the next spring for any crop you please. You may, in that event, sow lucerne again in the spring, or, after gathering a heavy crop of corn, run the same risk again the next fall.

When sown in the spring, the lucerne does not give a crop till the next spring. After attaining to the height of six inches, it begins to wither, and its sickly aspect induces in the inexperienced, the fear that his labor is lost. It will, however, bear the scythe without injury; and mowing is commonly necessary to destroy the weeds. If sown in the spring, the best time is from the middle or end of May, to the middle of June, the ground having been ploughed several times lightly at intervals of two or three weeks, until the superficial seeds of grass and weeds have been destroyed.

MANNER OF SOWING.

The ground being prepared as above described, and made as smooth and level as possible, by means of the harrow and brush, mark it off with a hand plough, or a small pole from the wood pile, into lands of six or seven feet, and scatter the seed as uniformly as possible. (It would be well to moisten the seed with warm water two or three days previously to sowing,) and then apply a heavy roller once, or a light one twice, and the work is done. The value of the roller is so little known in the South, that many of our great (large I should say) farmers are without that indispensable instrument. If you can't get a roller, the difficulty is easily obviated, by first ascertaining from a weather witch when there will be a hard rain, brushing in the seed just before it, and letting the shower do the work of the roller.

P. S.—I have seen it stated, and do not doubt the fact, that one seeding of lucerne will last twenty years.

CHEAP ROOFS.

We copy the following from the American Farmer. For our own part, we must confess we retain strong prepossessions in favor of a shingle roof over any other we have ever seen or heard of. Under ordinary circumstances, split shingles are cheaper and more convenient than sawed boards and sheathing-paper, and the exterior coating, we presume, might be applied to the one as well as the other. For security from leakage, we have never seen any thing superior to a shingle roof.

"The simple mode of roofing out-houses by nailing thin boards on light rafters, may be introduced to very great advantage, particularly in the country. It is only to subject boards before using to the action of fire, by way of thoroughly seasoning them; nail them on immediately, and cover them with sheathing-paper and a dressing of tar; and a covering, almost for a lifetime, may safely be calculated upon.

"The rafters, 3 inches deep, 1½ thick; the boards half an inch thick, straightened on the edges and closely nailed. The following composition for covering such a roof was employed at Wickham twenty years ago, and is at the present time as good as when first laid. The roof is nearly flat, having a run of one inch only to the foot, the boards being securely nailed and covered with a course of sheathing-paper, such as is used under the copper-sheathing of ships, made fast by small flat-headed nails. To 8 gallons of common tar add 2 gallons of Roman cement, 5 lbs. of rosin and 3 lbs. of tallow; boil and well-stir the ingredients so as thoroughly to incorporate them, and lay on to the roof while hot, with a brush, spreading it very evenly; then sprinkle it while hot with sharp, sifted sand, and when cold, tar and sand as before, after which a single coat of tar once in five or six years will preserve the roof for an age.

"To the above may be added, an incombustible, impenetrable wash, prepared according to the following directions:—Slake stone-lime with hot water in a tub, covering it to keep in the steam; pass six quarts of it through a sieve, it being in the state of fine dry powder, and add to it one quart of fine salt and two gallons of water, boiling and skimming it. To every five gallons of this boiled mixture, add one pound of alum, half a pound of copperas, and by slow degrees half-a-pound of potash and four quarts of fine sharp sand. The mixture will now admit of any coloring matter that might be preferred, and is to be applied with a brush. It looks better than paint, and is as durable as stone; it will stop leaks in a roof, prevent the moss from growing and injuring the wood, rendering it incombustible; and when laid upon brick-work, causing it to become impenetrable to rain or moisture. G. D."

The following recipe is taken from the New York Mechanic. We know nothing of its vir-

tues: if efficient, it is invaluable. Many of our most beautiful ornaments as well as useful instruments may thus be protected from the corroding effects of rust.

TO PRESERVE STEEL FROM RUST.

Take some melted virgin wax and rub it over the article to be preserved. When dry, warm the article again so as to get off the wax, and rub it with a dry cloth until the former polish is restored. By this means all the pores of the metal are filled up without injury to the appearance, and rust will not attack it unless it is very carelessly exposed to constant humidity.

FOOT ROT IN SHEEP.

An intelligent and successful wool-grower informs us of the method by which he entirely prevents the inroads of this disease.

It is known that the sheep, when removed from its native mountains and rocks, to the soft and luxuriant pastures, no longer has its hoofs worn away as in a state of nature, by which as they grow they are preserved fresh and sound; but the outer part, which is naturally intended to support the weight of the animal, grows out of all bounds, until it laps more or less over the soil, and retains the accumulated earth and filth which collects within. From this the disease originates.

According to our informant, by repeatedly paring off this crest of the hoof, as often as necessary, the disease is effectually prevented. Where it has already made progress, something more is necessary, as the application of turpentine, or tar, with cauterization, the disease being very similar in nature to the "foul in the foot" in cattle, which is successfully treated by rubbing a hot iron rod with tar between the hoofs. Although it had made such progress in the flocks of our informant, as to cause indirectly the loss of several hundred sheep, yet he succeeded after a year or two of careful attention, in removing it entirely.

He thinks it rarely reaches that degree of malignancy described by European writers, by whom it is represented to become contagious, and occasion directly the destruction of the animal; or at least that several years would be required to produce such a result; death appearing here to be caused by the severity of winter operating on weakened and emaciated animals affected by the disease.—*Genesee Farmer.*

TOBACCO.

This important product is attracting the attention of the whole agricultural world. Its cultivation is no longer confined to Maryland and Virginia, but our sister States of the West are making vigorous exertions to compete with their elder sisters. To sustain our supremacy we of the East must keep wide awake; their richer lands must be opposed with more skilful cultivation, and greater competition must awaken greater enterprise. We are glad to find, from the following notice, that this great staple, the source of uncounted millions to the wealth of Virginia, is working its way into the generous soil of our western counties:

TOBACCO IN KANAWHA.

This county, in which four years ago not a hogshead of tobacco was raised, is now able to turn out from one to two hundred hogsheads per year besides an enlargement of our crops we have very much improved in the quality of the article. Many of our principal farmers are now zealously engaged in the business, and before long there will be hardly an agriculturist in this country that will not endeavor to raise more or less. Sufficient experiments have been made to convince us all that tobacco can be cultivated here as well as in any part of Old Virginia. Persuaded of the entire practicability of making it a profitable business, our citizens have determined to petition the Legislature for an inspector at this place. Mr. Mark Antony, of Campbell county, a gentleman of great experience in this line, has been raising tobacco for the last two or three seasons in Fayette, and he has assured us that he has been entirely successful, and that he means to go into the business largely after this year. The farmers of Mason and Jackson, we believe, have no doubt but that their soil is very well adapted for yielding this most valuable crop. When it is recollected that tobacco is a cash article, a thing, by the by, very desirable to our people, there are few, we imagine, who will hesitate to turn their best attention to a matter of so much consequence to their interests.

Kanawha Jeffersonian.

Amongst the thousand projects, which will hereafter characterise our day as the era of inventions, we select the following for its ingenuity and simplicity. If there is not some defect in the principle, which we confess ourselves unable to detect, it is a wonderful invention, and calculated to produce a tremendous revolution in saw mills. It dispenses with a great deal of work and an immense deal of friction. The notice is from the New York Mechanic.

A STEAM SAW MILL.

BY MR. B. D. BEECHER, OF PROSPECT, CONNECTICUT.

This is a very novel invention, on a simple and rational principle, and should have been introduced long before. The engine cylinder is

secured in a horizontal position, with a piston rod extending through the length of it; and to each end of this piston rod is attached a saw, which works horizontally; so that two logs can be sawed at the same time, yet without the complication of cranks, pitmans, shackle-bars, or geer. The logs are set or adjusted by elevation, and the carriages are moved forward by a simple connection with the valve rod of the engine. This plan must go ahead of all other steam saw mills, and is likely to reward the well known enterprise of its ingenious inventor.

We have seldom been called on to resist a stronger temptation to a betrayal of confidence than the one we have conquered in withholding from the public the name of the author of the following communication. We have not the pleasure of a personal acquaintance. Of his success as an enlightened agriculturist we have seen a little, and heard much. Of his capacity for sound reasoning, and his facility of communication, we want no better proof than the following essay.

Our author will see from the first article in this No. which was in press before the receipt of his communication, how we have anticipated his view of the value to be attached to the early maturity of wheat.

To the Editor of the Southern Planter:

You seem to be at some loss to decide whether northern seeds transplanted to southern fields will have the effect of accelerating or retarding the maturity of the crops. You incline however to the opinion, that they will be retarded, and cite two experiments from Lindley and Knight in support of this view of the case.

With due deference, it appears to me, that the experience of Knight and Lindley leads to the opposite conclusion. They both maintain that the seeds of vegetables which have been grown for several years in a dry, quick soil, acquire a constitution which adapts them to the production of a rapid development of their progeny, when removed to a cold ungenial soil.

It is a well established fact, that northern seeds planted in southern soils *will* invariably produce the earliest vegetables of their kind—and *vice versa*. It may be accounted for philosophically in the following manner: The northern summer is short, and the season of vegetation comparatively limited. For the plant to pass through its various stages of growth at all, it must progress with great rapidity. Whoever has remarked the progress of vegetation in a northern climate, must have been struck at its wonderful development. The effect upon the germ is, that it necessarily acquires the habit of the plant; and the aptitude to early maturity is transmitted to its offspring for several generations, even when transplanted to regions where the seasons are of much longer duration.

A number of instances have come under my observation which fully confirm the truth of this fact. I have received seeds and plants from various parts of the U. S.; and compared with our native productions, I have uniformly found that the fruit ripened earlier or later, as the seeds were derived from the north or south. Northern corn may be gathered much sooner than our native varieties. The same variety of wheat from northern seed may be reaped several days sooner than when grown from our own seed. The earliest variety of garden pea I have ever known was received some years ago from the northern part of N. York. For two or three seasons it came to the table a week sooner than our own earliest varieties; but notwithstanding the greatest care in the selection of the seed, it is now not more than two or three days in advance of them. I have also discovered that many varieties of winter apples obtained from northern nurseries, will not answer our expectations. The fruit comes to premature perfection, and falls early in autumn, before the time of gathering. The summer varieties of the apple may very properly be selected from the north. Early peach trees should also be preferred from thence, on the same principle; but when a succession of fruit is desired, the later kinds should be obtained nearer home, or a little farther south of us.

Southern seeds on the contrary, when taken to the north, are seldom worth the trouble of planting. I have seen melon seeds from New Orleans which would barely perfect their fruit before frost. Our varieties of corn, taken to the north, will not ripen their grain one season out of ten. They produce gigantic stalks, similar to the growth of our own fields, but the season is too short to bring the ear to maturity. Many attempts have been made to acclimate our famous hominy corn, even on the other bank of the Potomac; but never with success as far as I have heard. It cannot be made productive north of Virginia, except possibly in the lowest and warmest parts of Maryland. I have frequently sent small parcels of seeds, both of ornamental and useful plants, to some of my northern friends; but with few exceptions they do not furnish the means of perpetuating themselves.

But notwithstanding that the northern seeds ripen so much earlier than our own, it should not be inferred from thence that it would be wise or proper to rely on them, even if they were accessible, to the entire exclusion of our own.—Some degree of judgment and experience is necessary, to enable one to make a judicious discrimination. As a general rule, when early maturity is chiefly desirable, it will be safe to plant all species which yield their fruits before the arid

heats of our summers overtake them. If the period of ripening is later than that, they will not repay the cost of cultivation. They cannot contend with our excessive droughts. The northern squashes, which are so much superior to our pumpkins, will not flourish in our latitude. The celebrated Dutton corn, which Judge Buel labored so earnestly to introduce into general culture, is totally worthless in Virginia.—Its time of ripening here was about the first of August—the most critical period, as all farmers know, of the corn crop. The consequence was, that it became withered and dried up beneath the scorching rays of our southern sun. Corn is an autumnal crop; and there can be no advantage gained in hastening its maturity earlier than September. On the other hand, wheat is with us, so to say, a spring crop. Formerly it came to the scythe in May; and even now, though no care has ever been exercised in the selection of seed, after the manner of the English farmer, the latest varieties ripen by the 20th or 25th of June; but not before the accession of a settled state of hot weather. The great desideratum to the Virginia farmer, is the possession of a productive variety of wheat that will ripen at least as early as the 10th of June; for we all know that in proportion as the time of harvest runs into the hot season, the greater is the liability of the wheat crop to be diminished in product. A cool June is almost invariably accompanied by an abundant harvest; while a warm, humid spell is attended with disastrous consequences. Unfortunately, the character of the weather at this most critical period, is generally so unfavorable, that a sultry June—for the last half at least—may be regarded as in accordance with the laws which regulate our climate. It follows then, of necessity, that as long as the time of harvest shall be protracted to the latter part of the month of June, there never can be any certainty, nor indeed probability, of reaping heavy crops of wheat. A good crop at that time would rather be an exception to a general rule, than in conformity to it. We have all seen our fields of wheat dry up rather than ripen beneath the influence of a hot sun. We must endeavor to restore the old order of things. The change has not been so much in the seasons as in the carelessness of farmers in preserving the purity of their seed. Much might be effected if each farmer would select for himself a small quantity of seed wheat every year, even if it were not more than a bushel, from the earliest ripened ears in his own field. In a short time he would have the satisfaction of perceiving a sensible improvement, not only in the quality, but in the early maturity of his grain. He should not only endeavor to obtain the earliest varieties, but he should also bestow the necessary care upon the soil, so as to give the seed a warm bed, *a suitable matrix*, for its development. He will never gain any thing, but rather he will lose time, by running after every new wheat he may hear of, as is now so much the vogue. The California wheat, the rock wheat the fly proof wheat, and the many others which might be enumerated, though all very valuable, perhaps, are no better nor so good, as he might obtain by careful selection from his own fields. In the mean time, the seedsman might very materially aid the farmer, by obtaining from the north, seed of all the earliest varieties. The northern seedsmen have imported many kinds of wheat from England, some of which may prove exceedingly valuable, and offer the desideratum that is wanting. The efforts of all should be directed to procure the earliest varieties, and then to preserve them in their purity; for it is throwing away land, seed and labor, one or all, to persevere in sowing late wheat.

I am fully sensible that I have diverged from the topic which I designed to elucidate; but the importance of the subject which led me astray, will, I hope, constitute a sufficient apology.

A Farmer.

MAJ. YANCEY'S ADDRESS.

We have been so fortunate as to procure a copy of an address delivered before the Agricultural Society of Buckingham, by Maj. Charles Yancey. Maj. Yancey has devoted a long life to the pursuit of agriculture, and has amassed a large fortune by the sweat of his brow. When called on for an address, like a sound practical man as he is, he preferred to detail his own mode of operations, to give to others the benefit of his hard earned experience, rather than to seek the reputation of an *orator*, by repeating common place encomiums upon the art of agriculture, and indulging in the too frequent strain of vapid eloquence. The address is replete with instruction—not a line but tells. If our copious extracts serve to teach others to do as the Major has done, we shall be pardoned the extent of our notice of this valuable production.

PLASTER AND CLOVER.

The Major conceives that clover and plaster must form the basis of improvement for our exhausted lands. On this subject he says:

Forthwith resolve to commence upon the improvement of your exhausted fields, by making and applying all the manure in your power, of animal and vegetable matter, such as corn stalks, wheat straw, and leaves taken from the poorest part of your woodland, designed for timber and not for cultivation. Much can be done in this way to increase your quantity of manure; and then rely upon clover and plaster, as the great

auxiliary of the whole vegetable kingdom, by which you can renovate your exhausted lands, and bring them up into good tilth again. Now, gentlemen, let me intreat and beseech you to commence the clover husbandry as the only known process by which you can render your lands fertile; you must not mind the expense; the money expended will return to you with usurious interest, in augmented crops, and renewed fertility of your exhausted lands, and amply reward you for all expenses, time and labor employed. One of two things must of necessity be done, either to improve your lands, or sell the bones of your fathers, as too many have done, and exile yourselves and families from the attachments of nativity, friends, and relations, and make an unmanly retreat, to the far lands of the south-west, where you will risk the diseases incident to a hot sun, and perchance, to many members of your family, an untimely grave.—Now gentlemen, let me again conjure and entreat you, being sincerely desirous to promote your interest, and being able from many years' experience to recommend the clover system, as the best mode of improvement—to prevail on you, one and all, to adopt it the next season—to sow upon your wheat and oat land a gallon of seed to the acre, bearing in mind, that poor land requires more seed, as many will fail to vegetate Poor exhausted places in your fields should have a dressing of some kind of manure, and be frequently plastered. Oats should be seeded thin, as they incline to branch much of moist springs, when they will injure the young clover. My preference as to time of seeding upon wheat land is the last ten days of February; and when the land is much heaved up by frost, when rains will settle it down, and give a cover to the seed and insure vegetation. If the ground be dry, hard and compact, I recommend a light single horse harrow, with white-oak teeth, to pass over the field, which will greatly assist the seed in vegetating, and instead of injuring, as many would suppose, greatly benefit your wheat, especially if the roller is made to follow the harrow.

Young clover seldom dies for want of moisture till the grain crop is cut. If the season then be dry, having been sheltered and protected from the heat of the sun sufficiently, then an application of plaster, of from three to four pecks to the acre, will be very timely, and greatly tend to preserve the young clover. For the second application of plaster the next season, I prefer the time when vegetation is fully abroad, and the clover near heading; there is then more vegetable matter for the plaster to act upon. Clover and plaster should be like man and wife, never separated; for without plaster, the crop will be feeble and sickly. Every farmer must feed his land either with manure, or clover and plaster, or it will not feed him; and will withhold from him that increase which would reward him for his care and labor.

Hoof nor tooth should be put upon clover before it is in full bloom—at any earlier stage is very destructive: and never at any time graze clover in the first year of its growth. I mean, when in bloom the second year, when if the crop be heavy, there will be more clover than the plough can well turn under. It will then not be bad management to permit your stock to derive the benefit. Sheep and hogs injure less than horses and cows. I will suggest to you that all good managers sow clover to improve their lands, and not for the purpose of grazing.

It will readily be perceived by you all, that the old three-shift (or land killing) system must be abandoned; for with less than four shifts, the clover husbandry ought not to be attempted.—Five shifts is much better—but with those who lack surface commensurate with their operating force, by forming grazing lots, of from two to four acres each, according to circumstances, upon lands adapted to grass, and sown with greensward, orchard and herdsgrass—as different grasses mixed, succeed best in forming the strongest and most durable turf to resist the hoof and tooth, under annual grazing. Twelve acres in such lots, well sodded with these grasses, will keep more stock than a common hundred acre grain field: say six lots of two acres each; three are to be under grazing at the same time; when eaten down, turn in upon the other three; when they are consumed, the first three will again afford a good bite. These lots can be inclosed by hurdles, sufficient for three lots, by removal as you change your stock, and may be kept up for a series of years, by cutting the turf every three or four years with a coulter plough, and an annual dressing of plaster, with a top dressing of manure occasionally. With the aid of such lots, the four-shift system can be made to answer tolerably well. Five-shifts I prefer to a greater number—for experience and observation teach me to believe, that our lands will require a hoe crop to cleanse them every fifth year. If permitted to lie longer, they become foul and wormy, and overrun and infested with sassafras, locust, briers, sorrel, blue thistle, and St. John's wort, &c. requiring great labor in shrubbing and preparing the ground to receive a crop.

Clover hay I consider equal, if not superior, to any other kind of hay, and readily made in fair weather. A very common error in curing it is exposing it too long in the sun, which parches up the leaves and makes the hay poor. It is better to sun less, turn it every hour, so as to make a fresh exposure to the sun through the day. At night, before the dew falls, cock it up in convenient hand stacks, there let it remain two fair days, and it will be cured by its own heat and the air, when it ought to be hauled in, and if any part be not sufficiently cured

to keep, a little exposure upon the yard will make it safe to place away in the hay-house, or in a rick—if the latter, it should be sloped off like the roof of a house, and covered with straw or top fodder—otherwise, the hay will sustain damage by rains. I estimate a quantity of well cured clover hay equal to the like quantity of sheaf oats, especially if cut, as the oats usually are, and ought always to be. Hay, when cut like oats, is less subject to waste—the stock eat it better, and derive additional nutriment, perhaps equal to ten per cent. It is admitted by the best farmers, that oats make a hasty and heavy draft upon land, and that clover is an ameliorating crop, drawing much less from the land, growing and sustaining itself upon atmospheric air and moisture, and known to be the greatest improver in the whole vegetable kingdom. It would then seem to be good economy to lessen the oat crop, and substitute clover hay.

CORN.

There is no doubt that one stalk of corn will grow better by itself than two stalks together; from which it may be inferred that it is best to drill upon lands of every quality. I think otherwise; and I will advise that such lands as will produce twenty bushels, and upwards, to the acre, only should be drilled, excepting hill-side land, regardless of quality, should always be drilled in a horizontal direction, to prevent washing; and leaving your plants asunder in the drill, according to the strength of the soil, from nine inches to two feet and a half. Upon lands a grade lower in tilth, I would plant and cultivate three feet six inches each way, which is as near as can be conveniently ploughed.—And upon lands a grade lower in quality, four feet each way, and in both cases, a single stalk. In planting corn in drills, I advise that the beds be opened deep, and the corn planted as deep in the bed as the surface soil. A higher elevation, near the top of the bed greatly exposes it to want of moisture in dry seasons, and makes it more liable to blow down in stormy weather.—To drill the whole crop of corn, does not suit tobacco growers, as it requires much more hand-hoeing, and at a season when you are busy putting up tobacco hills, and planting tobacco.—Ashes is a most valuable manure for corn; a pint of which put underneath your corn in planting, and a little earth drawn over the ashes before dropping the corn, I believe, upon old exhausted land, will increase the crop one-third in quantity. As to the effect of common manure you are all well informed. Corn land should always be harrowed down before planting, which working is as valuable as ploughing after the corn is up. In the first place, it prepares your land to receive the seed corn, and in the next place it destroys a young crop of grass and weeds, which will permit you to delay the first ploughing, and consequently the second, without injury to your corn, and enable you to embrace the whole grass-growing season, and make good corn with two ploughings, which if well done, and done in the right time, no more ploughing will be required; the cultivator then, will destroy a young crop of grass, and level down your land in good condition for seeding wheat. From experience, I am of the opinion that seed corn should be saved from the stalks that have produced two ears. Whether it be sex or not, I cannot say, but have observed it is most apt to produce its like, and that likeness increases as you continue the process.

My plan to prevent crows and blackbirds from pulling up the corn, is to soak the seed corn in copperas water, made strong—to remain in it till the grain is somewhat swelled and turned black. It is thus rendered obnoxious to those birds, and vegetation greatly expedited. I consider this method preferable to tarring corn, which, if smeared entirely over the grain, makes it impervious to moisture, which will cause it to rot, instead of sprouting.

A great saving will result in grinding all your stock corn, into fine meal, and feeding it mixed with cut hay, fodder, shucks, or straw; in this form I estimate three quarts equal to four of corn, a saving of twenty-five per cent. to those who have mills; to those who pay ten per cent. toll, a saving of fifteen per cent.; an object well worth your attention, and I hope many of you will test the estimate, fully believing that all who do, will concur with me in opinion; and I will further add, that when fed in this form to old animals that chew corn imperfectly, the saving would be one-half.

TOBACCO.

This is the Major's great crop, and one on which he is completely at home. We know not whether other systems be better; his has certainly been successful. We give his directions entire.

Tobacco being our great market crop, it will be expected that I treat upon the culture and general management of that plant. It being very important to have forward plants, the best selection of suitable ground for your plant beds must be made. New virgin soil is preferable, where to be had, with a southern exposure and the command of water, where practicable.—With the command of water and good fresh horse manure, plants can be raised early, and in despite of the fly, that are, in dry cool seasons, so destructive to our plants. I prefer a close fine soil, with as little sand as possible. Rather than a light puffy soil, I would take black-haw swamps, or white-oak land, which are inclined

to be adhesive and somewhat cold, with shallow soil. I will here remark, that such a soil, with the aid of manure, will produce your plants with better roots than native rich land: such land, when well burned, will divide its particles to great fineness, imbibe and retain more of the stimulus imparted to it by the action of the fire, and retaining its close compact nature, yielding moisture to the roots of the young plants, which in an open light soil, would be evaporated by the sun and drying winds of March, when the plants perish. The next process is burning; for the extent of which, the best rule I can give, is to burn till the ground assumes a red appearance; bearing in mind, that burning late in February, and early in March, must be less than what would be called early burning. The largest coals must all be taken off with a fine rake, then hoe up your bed, not exceeding two inches in depth, and avoid turning over the soil. Now put on horse manure all over your bed, then chop over with the hoes repeatedly, until the ground is reduced sufficiently fine, removing all the roots that can be got out, large and small, taking care not to rupture the substratum by pulling up large roots; mark off your bed, and sow a common table spoonful of tobacco seed for every hundred square yards, dividing your seed, and sowing one-half lengthwise, and the other half crosswise, by which means you will sow your bed more regular; tread, and cover well, and you may expect plants in due season, provided you give another dressing of horse manure, made fine enough to sift through a basket, when your plants are generally square, and at the time when rain is expected. Seasons for setting plants being uncertain, we usually embrace seasons in the month of May, yet I greatly prefer planting from the 1st to the 15th of June. It will come to the knife sooner, and make larger and better tobacco, than if planted in May.—Tobacco requires early and deep working, with a coulter plough first, then with a scoope to make fine earth; and instead of the old mode of ridging down, it is much better to hill it.—At the second working, plough and hill in the same way, and if well done, and at the right time, it scarcely will require a third working.—All the necessary working should be performed by the time your plants are in the second suckers; after that period, a working is often prejudicial. Young grass in that stage of its growth will not injure; indeed, it defends the plants from dirt upon the bottom leaves, and will cause it to ripen of a yellow grey color, and make tobacco of a finer fibre, and more easily cured.—Weeds will injure, by the winds whipping the leaves against them; they should be plucked up by the hands when suckering. I recommend low priming and topping—the shorter the stalk, the richer the tobacco. Take out the bud as soon as practicable, without crippling the bud-leaves. In my opinion, eight leaves is better to top to, than any greater number, even upon rich lands; it will make richer tobacco, more certain to make itself, and come to the house before frost, than any greater number of leaves. It is often seen upon weak land in dry cool seasons, the two top leaves of ten-leaf topping will not ripen, and they ought to be the two best leaves upon the plant—when, if eight-leaf tobacco had been in the same hills, it would have ripened to perfection, with longer and broader leaves, richer, heavier, and every way better tobacco. Besides, it will come to the knife two weeks sooner, making the crop much more certain, and enable you to seed your tobacco land in wheat that much sooner, which is a very great consideration with every farmer.

A very great and common fault in tobacco makers, is cutting tobacco before it is ripe, by which the loss is great, in quantity and quality. In an address of this kind, there is much difficulty in giving you a criterion, by which to know certainly when it is really ripe—for tobacco often assumes the appearance of ripeness (especially in dry weather,) when it is not ripe. I will, however, say, that when most planters think their tobacco is ripe, if they would delay cutting one week longer, it would then probably be ripe. I will draw your attention to the point of top leaf on the north side of the plants.—From the stalk to the declining part of the leaf, you will see yellow spots, which is the oil separated from the water; from thence to the point, it is green in color, if water only, and ought not to be cut until the oil has reached the point of the leaf. There is as much difference in a chew of good ripe tobacco, compared with a chew of half ripe, as there is in a ripe and half ripe water-melon. Unless the intense heat of the sun forbid it, (such heat as we had in the last month, September,) I always scaffold tobacco. As to the time when it ought to be housed, and fire applied, nothing is more indefinite, depending upon the degree of ripeness, the kind of land on which it grew, the strength of the sun, the state of the air, whether dry and cool, or warm and moist, and whether it ripened of a yellow-grey, or green color; the latter always containing more water, and longer before the water and oil separate. The best guide is this separation, the water having escaped through the mouths of the leaf vessels, where you see the yellow spots of essential oil, and the remaining green and watery part of the leaf approaching that process. A slow fire and weak heat must be applied, say eighty degrees, for if your tobacco gets too yellow, the vessels become so open, the least degree of heat too strong, will force out the oil with the water, kill the staple and cure it up red, the most worthless kind of tobacco that is made, there being no essential oil in it, in which the value of tobacco entirely consists.

That degree of heat ought to be continued, but not increased, one natural day; after that toasting the tobacco is prepared to bear an increased heat of five degrees more, the next natural day; the third day, 90 to 95, and the fourth day, 105 to 110 degrees, which ought by that time to cure the leaf perfectly; but of that fact be certain, by a nice examination above the joist, where the process of curing is the slowest, before you raise heat to 140 or 150 degrees, which is necessary to reduce the stems; even a greater heat if your tobacco is very large. There is then no danger of injuring your tobacco; the mouths of all the vessels are sealed up, no oil can escape, and your tobacco will be finer in fibre, closer in texture, and the large stems well reduced, exhibiting a fluted appearance instead of round, a sure proof that all the water is evaporated. Partly cured stems have, and will deceive even good planters, as to the right order to strike down for pressing. It is the moisture retained in the stems, that imparts itself through the leaf, as warm weather approaches. Of the different degrees of heat of which I have spoken much depends upon the tightness of the house, and ought to be regulated by common sense observation.

Never crowd your tobacco either upon the scaffold or in the house—ten good plants is as many as ought to be hung upon a stick: if small, go to 12. When arranging in the house to fire, give a space of ten inches between, and it is best to cure in the body of the house, commencing upon the joist; when the leaf is cured, raise it up in the roof, when 4½ inches space is sufficient—if house-room be scarce, fill the body again with your next cutting—the firing of that will cure the stems of that above. No man can cure as good tobacco in the roof as in the body of a house, a dry heat curing best. The tier next to the fire will be best, if heat be applied right—the steam passing up through so many tiers of tobacco, from which the water is constantly issuing out, before it passes the joist, the steam becomes vapor, and being confined some time before it escapes through the roof, has a deleterious effect, which, if not prevented by a constant and sufficient supply of heat, to dry off the moisture upon the plants, house-burn ensues, when then the leaf perishes on each side of the stem. The curing of tobacco is a nice chemical process; yet it is generally intrusted to illiterate managers and ignorant negroes, neither knowing the first principles of the science. The constitutent parts of tobacco, are wood, water and oil; and he who dries the wood evaporates the water, and preserves the oil, in the best manner, is the best tobacco curer.

The following sketch is drawn to the life; few things of the kind have been better done. Any one who has ever felt a flea (and who has not?) will recognise the portrait.

DOMESTIC SPORT.

Did you ever catch a flea?—not you—you don't know how—nor I neither—but they catch us don't they? When you feel them biting the calf of your leg, just about getting up time you slip your hand down so cautiously, thinking to come over him—you miss where you think he is—give the hair on your legs a smart pull—find you hav'nt got him—swear a little and all the time the vagabond was sitting on your knee, looking on and laughing at you—up you bounce in a fury, determined to murder the villain, and find the flea sitting quietly in the middle of the bed rubbing his claws and pretending not to see you—down goes your open hand—and you catch a handful of sheet—and see him laughing and capering on the pillow, and singing, "You can't come the giraffe over me." "Hit one of your size," &c. This don't provoke you a bit—oh no! You make one more grab and he is on your arm, and in a Jeffy he is down your sleeve and digging away in the small of your back. Now jam your back against the bed-post, tear an inch or two of your shirt—off comes that garment, and before it's over your head you feel him again on your leg. Give yourself one thundering slap; say a naughty word—and then give it up quietly, having made up your mind that a flea is invincible.—*Pennant.*

TO THE READER.

A newspaper may be likened to a stage coach—its readers to the passengers—its contributors to the horses, and the editor to the poor devil of a driver.

We have jogged along pleasantly and we hope not unprofitably together and have at last arrived at the end of our journey.

About the first of January, 1842, the same coach with a stronger team will start upon a new route beautifully diversified with hill and dale and altogether very promising in appearance. Those who have acquired confidence in the skill of the driver are respectfully requested to come forward, pay their fare, and book their names for the coming trip.

☞ The vehicle is very roomy and there is no danger of being crowded.

BACK NUMBERS.

In consequence of an accession of numbers that we did not anticipate we were compelled to increase the edition of our later numbers and commence the reprint of our earlier ones. This is a heavy business, and is not yet quite completed; in consequence some of our subscribers are still without the early numbers. A faithful record has been kept of their names, and they may each and every one count upon their being forwarded as soon as they are ready. We probably regret the delay which has deprived them of them more than they do.

ENGRAVINGS.

We are compelled to apologize again for the want of engravings. We know the value of cuts when they are properly selected, and this department has occasioned us more trouble and anxiety than any other of the paper. Strange as it may appear, it is nevertheless true, that in the city of Richmond there is not a single individual who makes a profession of engraving. We are now making arrangements to remedy this defect, and we hope soon to be surpassed by no paper in the Union in the beauty and variety of these embellishments.

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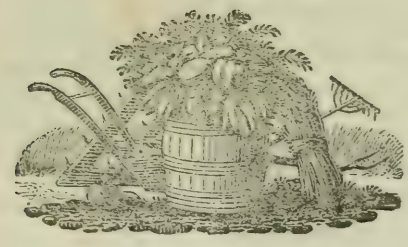

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THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.* | Tillage and Pasturage are the two breasts of the State. *Sully.*

C. T. BOTTS, Editor. **Opposite Merchants' Coffee House, Main Street.**

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THE VALUE OF LIGHT SOILS.

From our position at the capital of the State we frequently have opportunities of personal communication with distinguished agriculturists, seldom enjoyed by the generality of our readers. It is this direct, personal, communication from which we derive the most valuable information, and we never fail to improve such an opportunity to the best of our ability. The meeting of the Board of Agriculture lately brought us in contact with Gen. Steinbergen, from the county of Kanawha. The General is one of the most celebrated farmers and graziers in the western part of the State. As an assessor upon the line of the James River Canal, he has had an opportunity of inspecting the celebrated farms in its neighborhood, and he has looked upon them with the critical eye of a farmer. The result of his observations and conclusions, by permission, we communicate to the public. Be it remembered, that it was with great diffidence that the General advanced his opinions of the proper mode of cultivating these lands, and that he made many objections to the seeming impertinence of a stranger's pretending to give advice upon such a subject. We think our readers will thank us for our exertions in conquering his scruples upon this head.

In the first place, the General thinks very highly of the capabilities of light soils, as contradistinguished from stiff ones. His own farm consists of rich alluvial Ohio bottom and what was formerly sand barrens, at the back. Into these sand banks, he assures us, he has frequently run his ramrod to the head—these sand *barrens* now yield him an average of seventy-five bushels of corn to the acre, and are productive of more clear profit than his stiff, alluvial bottoms. He thinks the process, by which they have been brought to this point, would render our light lands infinitely more productive. This mighty effect is to be produced by grass and cattle. Of all the grasses, the General esteems the Kentucky blue grass (our English sword grass) by far the most valuable; as an improver, he reckons it, to clover, as twelve to five. This grass, he is certain, may be introduced into our country; indeed, he sees it springing spontaneously upon every nook of uncultivated rich land, about James River. His process is this: he hauls all his long forage, corn stalks, &c. upon a piece of poor, sandy land, for which they form a cover of several inches. Upon these he feeds and winters his stock; the following summer, he is sure to find a sprinkling of blue grass; this he encourages by every means in his power, cutting down all noxious weeds before they ripen their seeds, top dressing, and again wintering his stock above it. By these means, in the course of two or three years, he obtains, a thick sod of blue grass, when he considers his business as finished. To make a crop of corn or wheat, all he has to do is to turn under this fertilizing sod, and plant, or sow, upon the top of it. The same process of covering, trampling, and feeding, follows every crop, which causes an immense reproduction of the buried blue grass. This may now be grazed, and top dressed, to be again turned under for a crop of any thing, enriching the land at every turn. The General attributes much of the value of this process to the trampling of the cattle. He thinks that this mechanical pressure is as beneficial to light, as it is injurious, to stiff clay soils. Particularly beneficial does he esteem it to the production of blue grass.

In this system we have great faith. What say the owners of light, sandy soils. Will ye try it? In the first place, we believe in the hauling out of vegetable matter, and making a cover of it, instead of hauling it into the farm yard. The value of the trampling we are not so sure about, but in the top dressing, that is afforded the grass by wintering cattle upon it, we have the most implicit faith. We have long held and maintained, that the most advantageous mode of applying manure, is to top dress a grass sod. We have, moreover, entire faith in the value of blue grass. We believe it to be supe-

rior to any thing known in this country as a renovator, and we do entertain the most lively hopes, that there is nothing in our soil or climate inimical to its growth. We care not whether the main crop be tobacco, corn, or wheat, we believe the greatest yield may be obtained from a sod which has been increased and strengthened by an application of all your manure in the shape of a top dressing. We sincerely hope that our friend may be right in his opinion, that blue grass is only a stranger to our lands for want of manuring and patience.

We have received many other valuable hints from General Steinbergen, which we shall, perhaps, on suitable occasions, give to the public, without always crediting the source from whence they are derived.

For the Southern Planter.

COLIC OR GRUBS.

I give you here a recipe for curing horses of colic or grubs. I have tried it more than a dozen times (with severe cases of *belly-ache*, whether from colic or grubs I could not say) and without failing in a single instance to afford almost instantaneous relief.

Simply rub the large vein on either or both sides of the neck of the horse with *spirits of turpentine*. Rub it in strongly the whole length of the neck over the vein, and in twenty minutes the horse will be relieved.

I was told of this practice two or three years ago—and have acted upon it ever since, and have never known it fail. Further than this, I vouch not for it—but any thing that may lessen the suffering of that noble and useful animal ought to be known to and tried by all.

So if you think it worth a place in quackery, I give it you for insertion in your paper anonymously.

The above is an extract from a letter written us by a friend who is entitled by hereditary right to know something about horses, and for whose veracity we will vouch. The remedy is one of the most convenient character we have ever heard suggested, which is a point of great importance.

For the Southern Planter.

PLASTER.

Stony Point Mills, Dec. 8, 1841.

Dear Sir,—You expressed a wish, when I had the pleasure of forming your acquaintance, to receive communications on practical subjects. I have nothing of my own to offer, but send you the results of some experiments, made by Capt. Thomas Wiley, of Amelia, with plaster on the crop of corn. The results were tested, as the value of all experiments should be, by weighing, and therefore the more to be relied on.

1st. Row not plastered produced 50 lbs.—corn soaked and rolled in plaster when planted.

2d. Row plastered produced 81 lbs.—corn soaked and rolled in plaster when planted.

3d. Row not plastered produced 55 lbs.—applied when the corn was shooting.

4th. Row plastered produced 78 lbs.—applied when the corn was shooting.

5th. Row not plastered produced 40 lbs.

6th. Row plastered produced 45 lbs.

7th. Row, urine saturated with plaster, produced 61 lbs.

The two last applications were made as late as the 5th of July.

I think the above results prove beyond a doubt the value of plaster, and that the farmer is remunerated for the money and labor. If you think the above worth an insertion, you are at liberty to use it. Wishing you success in your enterprise, I remain,

Yours very respectfully,

NATHANIEL M. OSBORNE.

For the Southern Planter.

STEEL PENS.

Mr. Botts,—I noticed in the December number of the "Southern Planter" an article on "Mending Steel Pens," which does very well as far as it goes; but *mending* merely, is not the most important means to preserve them in a writing condition. They will lose their quality, and become good for nothing from corrosion, unless proper measures are taken to prevent this; which may be done in this way:

After writing with a steel pen, it should be wiped dry with the skirt of your coat, or some woollen material, (broadcloth is preferable) and stuck, with the point downward, in a tumbler glass half-full of fine mustard seed shot, where it should remain until necessity again requires its use. In no instance should it be suffered to remain wet with ink for even one minute; if so, the fluid penetrates the metal, destroys its elasticity, and in a short time reduces the steel to scales of rust.

By following the directions set forth above, a steel pen may be preserved in good condition, with occasional mending, as directed in the article first referred to, for several months.

C. M. FARMER.

QUERIES.

We comply with the request of a practical and experienced farmer in this vicinity by inserting the following queries. We shall be very

happy to be enabled to furnish answers to any or all of them. The querist himself can richly repay any information he may obtain by communications of his own.

"Question 1. What number of fields do you think it best to divide your farm into? In answering this question, I expect the number will be governed by the number of acres and its distance from town.

"Question 2. What is the best and most economical way to dispose of your manure? also what crops will give the best return, having regard to profit and the permanent improvement of your land?

"Question 3. What is the most profitable crop? To this question I shall expect an answer from each one, according to his own locality.

"Question 4. At what stage of improvement must your farm arrive, to make it advisable to graze?

"Question 5. Have you been in the habit of using lime or plaster, what quantity, and what effect, and what kind of soil is it best adapted to?

"Question 6. With what crops can you with the same amount of labor make the most rapid and permanent improvement, taking in view the profit at the same time.

"Question 7. What is the best and cheapest mode of raising hogs?

"Question 8. What is the best and cheapest feed for milch cows, and how prepared?

"Question 9. What is the best kind of grass for hay, improvement, and grazing? This question will be governed by locality and soil.

"Question 10. What are your views as to the best mode and time of ploughing?"

For the Southern Planter.

ORNAMENTAL FARMING.

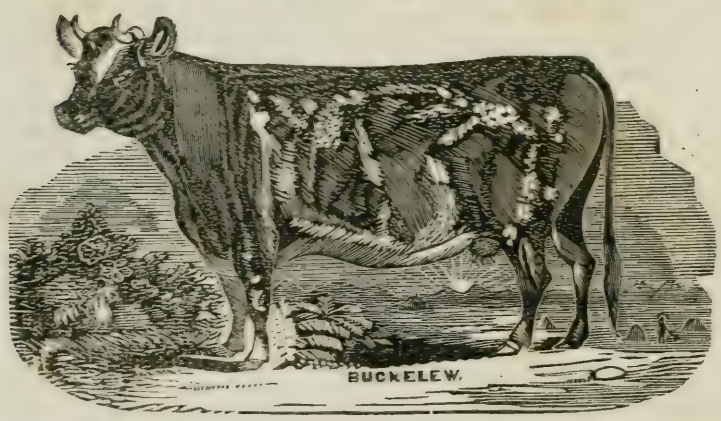
I am happy to see, Mr. Editor, your frequent endeavors to excite in your readers a spirit for taste and ornament. Nothing is more wanting in our community. The necessaries of life we all have in the greatest abundance. It is the refinements and elegancies of society of which we are in search in this country. The poorest farmer in Virginia makes enough to eat, to drink, and clothe himself and family. But there is something beyond these mere necessaries universally sought for. Artificial wants have arisen with artificial society, which must be gratified. These wants are of all grades and degrees. Their gratification constitutes the difference between civilized and savage life. Many of them are expensive and hurtful; others are simple, cheap, and gratify, while they elevate, the soul. Amongst this latter class should be ranked the pleasure of an ornamented homestead. There is no good that may not be abused, and an extravagant fool may spend thousands that he cannot afford upon pleasure grounds, to the neglect of the productive farm. On the other hand though, you will frequently find a thrifty farmer, as he is called, who is laying up money rapidly, his stables are good; his barns are good, but his house is uncomfortable, and his yard neglected; his cattle and horses are well provided for; *only* his *family* are disregarded. I know not which of these characters is the biggest fool. What does the industrious miser lay up his hoards for? If he reflects, he will tell you that it is only valuable to procure the luxuries of life, and yet he is doing forever without the cheapest and best of these luxuries, that he may lay up that which is only useful to procure them. This is very like the man, who, seeing a heavy shower coming up, jumped into a pond to protect himself from the rain.

But as *gain* is the order of the day, and as in truth the only avenue to the senses of our countrymen lies through the glittering plain of riches, I will drop any farther comments upon the *happiness* to be derived from a neat and ornamented homestead. It is not only, as you have frequently asserted, productive of elegance and refinement, but it is the most *profitable* outlay that can be made upon a farm. I once knew a very slovenly neighbor of mine to sell out an excellent little farm for the sum of five thousand dollars. The purchaser, by the use of paint, refreshened the appearance of the buildings—he enclosed the yard with a neat paling, which was also prettily painted. Grass plats, flowers, and shrubs altered the whole appearance of the place, and without having added a dollar to the fertility of the soil, he received an offer of nine thousand dollars for what had originally cost him five—his outlay in improvements had certainly not exceeded fifteen hundred dollars. The offerer was a gentleman to appreciate the beauties of such improvements, but had not the judgment to calculate the cost of them. I verily believe that a man of taste and energy might make a fortune by going about the country buying up dishevelled old farms, improving the appearance, and selling them again. Every body appreciates such work when it is done, but very few are aware of its excellencies until they see it. Now, in this shifting country, where every man is ready to sell, can there be a more profitable outlay than that expended in bringing to order and neatness the dwelling, yard, and general appearance of the farm. Say it adds not a cent to the product, and say the owner takes no pleasure in such things himself, will not the increased price that his farm will bring an hundredfold repay him for the labor required? Why, sir, to a certain extent, and that a very considerable one, it will not cost a cent. The children and other members of the family, at times at which they

would otherwise be idle, might be planting flowers and shrubs, which would not only add to their own comfort and pleasure, but greatly enhance the value of the property. I wish some poor man, who reads this, living in a log cabin in an old field, would only try it; whitewash his house, enclose a little yard with a neat paling, sod it, make two or three gravel walks, plant some flowers around the borders; his children will help him and thank him; he can do it all at times that would be much worse spent; and see if his condition does not begin to improve from the moment he completes it. My word for it he becomes a better, and happier, and richer man from that hour. He will soon begin to enjoy pleasures and delights, that are wanting to many of his richer and more heedless neighbors. His home will have a charm for him unknown before; his wife and children will thank him for the new and elegant amusement that he has afforded their leisure hours, and his neat and comfortable little homestead will become the envy of every passer-by. B.

Our correspondent is perhaps a little enthusiastic in his calculations, but we doubt not that neatness and ornament, to a certain extent, are *profitable* as well as pleasing. A farm that is neatly kept, with the dwelling house and ground about nicely ordered, gains a reputation that will cause it to command a purchaser at a high price, whenever the owner chooses to part with it. Let any one ask himself the difference he would make between a place surrounded by a general air of comfort, and one of those dingy, cheerless dwellings that disfigure the country, and he will find it much greater than the cost of improvement.

AYRSHIRE COW.



We have heretofore intimated an opinion that this stock of cattle was best adapted to cross upon our native breed, which, we believe, must, at last, form the foundation for a permanent improvement. We present our readers with a specimen of this stock, to which the engraver has not done as much justice as we could have desired. They are a hardy race, coming from the North of Scotland, accustomed to slender herbage, and, therefore, not requiring the luxuriant grazing that our pastures seldom afford, and which it is well known is absolutely necessary to the constitution of the Durham family.

Their milking properties are very great, by some esteemed superior to the Durhams themselves; amongst the supporters of this opinion we have already recorded the name of the celebrated Sir John Sinclair. Whilst it is perhaps true, that, upon the most generous keep, no stock can vie with the *far* famed Durhams, we still incline to the opinion, that the Ayrshires are more hardy, better calculated to rough it, and infinitely superior for a short grass country.

For the Southern Planter.

LEGISLATIVE ACTION.

A few of the farmers of this country are making loud demands for "legislative action." Let them take care that they do not renew the old fable of the frogs that would have a king. Being a little old fashioned in my notions, I am somewhat jealous of *legislative action.* I sup-

pose I have not kept up with the modern *march of intellect*. I am *behind the age*, &c.; but, sir, I am a devoted friend to agriculture, and I should like to know what it is these gentlemen seek. They say that manufactures are protected and agriculture neglected. Do they desire a duty upon foreign grain: it is not necessary; we find sufficient protection in our natural advantages; a protection much more safe and certain than any that can be afforded by *legislative action*. I am afraid, you too, sir, have been smitten with the rage of *improvement*, and you will probably, shudder when I tell you, that, as a farmer, I rejoice that the bill establishing an agricultural board is likely to fail in our State Legislature. I looked with horror upon the proposal last winter, and began to tremble for our agricultural prosperity. I considered it only as an entering wedge to further "legislative action," and much dreaded that agriculture was at last doomed to experience the deadly effects of a legislative embrace. Luckily, the sound sense of the people of Virginia seems to have inspired her legislators this winter and they recognise the principle, that it is always safest to trust favorite occupations to private direction. Pursuits, desirable in themselves, but unpopular on account of natural or artificial obstacles, may require legislative aid. But this surely is not the case with agriculture. It is the favorite pursuit of America, numbering three-fourths of her inhabitants amongst its followers. No, gentlemen, agriculture is built upon a stronger foundation than legislative support. All she asks is, that you will let her alone in the full tide of prosperity, and all she has to dread is, the Upasbreath of the Legislature.

What do these brawlers for legislative action desire? They say that manufactures and commerce are nursed at the legislative breast, whilst agriculture is left to cater for herself. Fools, do they not know, that commerce and manufactures are but the handmaids of agriculture, and, that, if these arts are benefitted by legislative aid, agriculture is best encouraged and sustained. If it be indeed true, and I do not mean to dispute it here, that the direction of labor is the proper object of legislative action, what prayer should agriculture prefer to the directing authority, but that it would please to convert raisers of agricultural products into artificers and consumers of agricultural products. No, no, noble gentlemen of the Legislature, work away upon commerce and manufactures and, if you please, upon the currency; agriculture will not be jealous of your favors—if her name is never called in your legislative halls, none but a few unthinking fools will ever complain. I do not mean to call down upon my humble head the vengeance of your honorable body, for I know that you are potent, to *kill*, at least; but I am afraid your touch has not always been Midas-like, and I think the grey-headed farmers of America have seen enough of "legislative action" to forbear to invoke its aid for the cause of agriculture.

AN OLD VIRGINIA FARMER.

After some hesitation, we have consented to introduce our antiquated correspondent to our readers. Of course, we shall not be held responsible for all his opinions; especially, do we disclaim any participation in those unbecoming sneers at that honorable body, the Legislature of Virginia, that we half suspect lie lurking in his communication. It would be tedious and unnecessary to say wherein we agree, and where we differ from the old gentleman, but wherever the reader is in doubt upon this point we beg him to imagine that our opinion exactly corresponds with his own.

NEW GROUNDS.

From a conversation with our friend, Mr. Thomas S. Dicken, whose practical knowledge of farming is equal to that of any gentleman with whom we are acquainted, we derived the following hints for the management of new grounds:

Cut down your trees in spring or summer, whilst the sap is in full flow: this expedites extremely the decay of the stumps and laps. Great advantage is obtained by cutting your trees as close as possible to the ground; your swingletree then passes over the top of the stump, and you can plough much closer to it; besides, the saving of fire-wood is considerable, and if the tree is a timber one, every body knows the most valuable part is that next the ground. After removing your fire-wood, never burn the laps and leaves, but permit them to remain upon the surface of the land, two years, if possible; by that time, if they were cut when the sap was up, they will be greatly decayed. Proceed, then, to fallow your ground, turning under every thing that the plough can manage; if any large sticks remain undecayed, they must of course be removed by hand. This fallowing should be done during the fall or winter. In the spring, plant your corn and take a little pains to cover it with dirt as free from the trash as possible. The process of decay still goes on, and a quantity of decomposed vegetable matter is obtained, much greater in quality and quantity, than could have been derived from the ashes of the burnt trash.

Mr. Dicken, whose experience is very great, and who attends to every operation on his farm

in person, informs us, that this system was once accidentally pursued, because it was not convenient to follow the old, and favorite, plan of burning. He was astonished at the result; he of course continued it, and he assures us that he has never seen such crops of new ground corn as it is sure to produce.

Here, again, is the cover afforded to the land for two years producing extraordinary effects. Mr. Dicken gave no credit to this fact; but we are satisfied that the office of covering and sheltering alone, which the trash had performed for two years, would have been worth more than any benefits that could have been obtained by burning.

PLASTER.

A distinguished agriculturist lately expressed to us the opinion that wheat was greatly benefitted by plaster, scattered at the time of sowing; but the application to the growing crop, in the spring, he considered highly injurious, inducing rust by the absorption of moisture.

THE HORSE.

A writer in the Cultivator has undertaken to give a series of very minute and particular directions for the keep and management of this noble animal. His treatise, which is chiefly a compilation from some English works, published by the Society for the Diffusion of Useful Knowledge, although containing nothing new, forms, we think, a good summary upon the subject. We are of opinion, however, that the writer has fallen, now and then, into a popular error, and we design to give a condensed view of his directions, accompanied with our own poor criticisms.

First, of the STABLE. He recommends that it should be so constructed, that its temperature, during spring, summer and fall, should be very nearly the same as that of the open air, and in winter, not more than ten degrees above that of the external atmosphere. Now this we apprehend should depend very much upon what is the temperature of the external atmosphere, which, certainly, varies much in different latitudes. We should prefer saying, construct your stables so that you can ventilate them and make them cool in summer, and close them and keep them warm in winter, rendering the horse at all times *comfortable*. It is undoubtedly true, that serious injury might arise from keeping a horse too long, even in winter, in the close and confined air of a heated stable, but we are inclined to think that animals in this latitude are in little danger yet awhile of suffering from that extreme. We are satisfied that a good warm stable, with a temperature much more than ten degrees above that of the external air, will add much to the health and comfort of the horse.

With the following directions we have no fault to find—the advice concerning the *light* we think particularly valuable:

"The whole stable, especially the stalls, should be kept clean as practicable, by frequently changing the beds and strewing plaster of Paris on those spots where the urine falls. This not only prevents its offensive odor, by combining with its ammonia, but thereby forms one of the most powerful of all the new manures yet discovered. The floor of the stalls should be sloped barely enough to drain off the urine not absorbed by the litter and plaster of Paris, since a level position for the horses' feet is the most natural, and consequently best for the muscles and sinews of their legs and ankles.

"Light is quite as essential to the soundness of your horses' eyes, as pure air is to the health of his body. But it should be let in through glazed windows, and open gratings, which serve also as ventilators, under the eaves of the roof. No openings should be made, either under the mangers, or opposite, or just above the horses' heads, as partial streams of air often produce colds, with all their bad consequences in horses; especially if they are put up in such stables immediately after being much heated, and before they are rubbed dry. A glaring light, however, should always be avoided, since horses can neither rest, nor sleep, nor fatten so well in such light, as in that which is moderate."

Under the head of GROOMING, good currying and rubbing is of course recommended. To obtain a glossy coat, an occasional mixture of two or three table spoonsful of brown sugar with the food is recommended in lieu of blanketing, which he deprecates altogether. We have no doubt that cold may be induced by exposure after *heavy* blanketing—but a light cover we hold to be indispensable to the high grooming which should mark a gentleman's riding horse from top to toe; and we would as soon fear the effeminating effects of a stable itself, as of such a cover.

We have never used the sugar, but have found carrots, in the spring of the year, a very healthy food, imparting fine life and spirits, and inducing a speedy shedding of the winter coat.

What follows appears to us to be unexcep-

tionable, and we hope we shall not be considered captious in the few objections we have had to make to this excellent essay:

"It is common, immediately after hard working or travelling in hot weather, to wash horses all over, or to swim them in water much cooler than their skins or their atmosphere. This practice is very dangerous, often producing colds, fevers, and frequently fatal chronic complaints, unless the same exercise is speedily repeated. Even the partial application of very cold water to parts of the body, or the legs, when the horse is much heated, should be avoided; for his appearing to be gratified by it is no more a proof that it is good for him, than the manifest gratification of a sot in dram-drinking, after having been drunk, is proof that *he* is benefitted thereby. The poor horse, which knows no better, experiences present relief, at the expense of future suffering that he is incapable of anticipating, or brute as he is, he would probably reject it. Rubbing in the shade and leading the horse about at intervals, constitute the proper treatment both for farm and other horses, when much distressed by severe work of any kind.

"But all precautions to preserve the health and vigor of your horses will prove unavailable, unless you pay equal attention to the kind and quality of their food; the manner of feeding them, and also of giving them water.

"To enable either farm or other horses to render the utmost service of which they are capable, they should be fed wholly on dry food, the grain and long forage to be old and sound, the first of which should be ground, and the latter chopped in all cases where practicable. For saddle and carriage horses under hard and constant usage, oats are better than indian corn, and that is preferable to every other grain. The blades also, when well cured, are better than any other kind of long forage, as they contain more saccharine matter. When either farm or other horses are much heated, and great haste is indispensable, no other food should be given them than a small handful or two of old oatmeal stirred into a few quarts of soft water, with a little salt dissolved in it. Before this is given, let their nostrils, inside and out, be cleansed by a sponge or rag wet with vinegar and water, if the former can be procured, if not, with water alone. After a very hard ride or travel in harness, the horse should be suffered to wallow, before any thing else is done to him, if time and weather permit, rather than to be led immediately into a stable to be cleaned and cooled.

"Manger feeding with ground grain and chopped long forage, is now very generally preferred in England and Belgium, as well as by the best judges in our own country, to the old fashioned, most wasteful way of giving unground grain in mangers, and unchopped forage in racks. These last are disused every where, but in a few places for green grass; and, in lieu of the rack, wide, deep mangers are adopted, with small iron or wooden bars fastened across them, to prevent the horses from throwing out their food. In England the most common food for farm horses consists of a mixture of bruised oats, beans, and chaff, in the proportion of eight pounds of oats, which are equal to about five quarts, (their oats being a few pounds heavier per bushel than ours,) two pounds of beans, with twenty of chaff. Thirty-five or six pounds of such food is the day's allowance for medium sized horses while at work, and forty pounds of it for large horses. Such is the common allowance during winter, when the horses are constantly stabled. But from the end of April to the end of July they are usually turned out at night, and the whole of rest days. Other kinds of food however, are much used by small farmers, such as barley, unmerchantable wheat, beans, peas, Swedish turnips, carrots, and potatoes, with grasses of various kinds, but very little oats or rye. In Belgium the chief food of their farm horses consists of green clover in summer, and roots with cut straw in winter. A few oats are occasionally given, but not in so regular a manner as to give great muscular strength. They usually go to work as soon as it is light, continue at it until ten, then rest and feed until two or three or three o'clock, when they resume and continue their labor till six or seven. In harvest time they work from daybreak until evening, resting only a few hours in the heat of the day. A pair of horses with one plough are allowed for every forty acres of arable land, the whole of which, on an average, is ploughed twice and harrowed three times; besides this they cart fodder and manure, and do the harvest work. Both in Belgium and England, they are moderately watered before and after feeding. When not worked, water is given them three times a day, and always of the softest kind, when it can be procured. In ordinary travelling also, a liberal supply of such water is strongly recommended to be given, a little at a time, which prevents excessive thirst, and the consequent drinking to excess. This is very dangerous, especially to a horse much heated, especially if the water be very cold.

"In addition to the foregoing condensed remarks, taken chiefly from the two excellent works already mentioned, permit me now to offer such information as I have derived from others, and from my own long experience as an owner of every kind of horse but the race horse, in regard to the best mode of managing those most useful animals, in our own country. I will 'begin (as the saying is) at the beginning.'

"Colts should always be weaned before the grass is generally gone, and should be put into some enclosure where they cannot hurt them-

selves. Their dams should be stabled for a few days, and milked if their bags swell much. These colts should never be stabled until broke, nor much after that before they are full grown. But they should have well covered shelters, open to the south, under which to protect themselves from bad weather. Plenty of good corn, fodder or hay in winter, and grass when it comes, and as long as it lasts, will keep them whilst unbroke, in a healthy, growing condition, which is far better than keeping them very fat to force their growth beyond what is natural; for overgrown horses, like overgrown men, rarely, if ever, have hardihood, vigor, and activity in proportion to their size. In fact, very large horses are objectionable, for all purposes, except slow and heavy drafts. The gentling of colts should commence soon after they are foaled, and continue until they are backed. Frequent handling, occasional salting or feeding them out of your hand, and stroking their necks are all good practices. From two or three years old, they should be accustomed, by degrees, to the saddle and bridle; a light snaffle is best. Thus treated, the breaking becomes so easy, that they will rarely play any tricks, and may be soon taught, even to stand fire, by shooting off a gun or pistol, for a few days, just as they commence eating. In a word, uniformly kind, gentle treatment by their master, will always make such good, docile, gentle horses, that they will often follow him, like his dog, and will manifest equal regard for his person.

"All the general directions for the treatment of horses in England will suit quite as well for the horses of our own country. But the articles of food being somewhat different with us, I will now add a few remarks on that subject. In most of our States, the chief food for horses is Indian corn and the fodder thereof. Both are usually fed away in the most careless, extravagant, and wasteful manner—the corn being given in the ears, and the fodder in bundles, which are thrown united into the horse-racks or on the ground. Much, then, is wasted by being trampled under foot, and so dirtied that the horse rejects it, whilst many of the grains of corn pass through his body undigested, and of course, render him no service whatever. He also loses all the benefit of the cobs, which he rarely eats when whole, although they make an excellent food, if ground up with the grain. This mode of feeding is much the most general, notwithstanding it has been indisputably proved by actual and numerous experiments, that to give the corn and cob ground together, which is called *cob-hominy*, and the fodder chopped in a cutting-box, not only saves more than enough to pay the extra expenses of grinding and cutting, but actually keeps the horse in better condition than the same quantity of corn and fodder given in the usual way. Moreover, it is a cheaper food than any other of which grain, either whole or crushed, forms a part. Take oats, for example, which are the most common, where corn is not used, and let us estimate the former at forty and the latter at sixty cents a bushel, which I think a fair general average in the States wherein corn is a staple crop. Now as only half the cob-hominy is grain, the mixture will cost only thirty cents a bushel, and is generally deemed fully equal in nutritive qualities to a bushel of oats. If these also be crushed, we must add about four cents to their cost, and the difference between the two kinds of ground food, (the chopped fodder being the same in both cases,) will be about fourteen cents per bushel, in favor of cob-hominy. Suppose, then, that one gallon, three times a day, is enough, as experience has proved it to be, for an ordinary sized horse, with eighteen or twenty bundles of fodder, the saving in one week, by feeding with cob-hominy, will be a fraction over thirty-six cents, or nearly nineteen dollars a year for each horse, which is the annual interest of rather more than three hundred and fifteen dollars. Yet not one in a hundred of us ever think of saving it! Few southern and western men who are '*well of*,' (as the saying is,) keep less than three or four horses that do no farm work, and this they do at an additional yearly expense, when oats and unchopped fodder are their food, of fifty-seven dollars for three, and seventy-five dollars for four horses, rather than be at the small trouble of having their fodder chopped, and their ears of corn ground into cob-hominy. Ten or twelve poor children might be annually schooled for that sum. For horses that are often hard ridden and rapidly travelled, oats are generally deemed better than corn, as less heating; but a greater quantity of them must be given, in the proportion of about one and a half gallons of oats to one of corn at each feed. Under suchus age, green food should never be given if avoidable. But when the horse can rest for a few days some may be allowed him, in small quantities, by way of medicine. Any kind of grass that a horse will eat, may answer the purpose, but lucerne and clover of the first cutting are deemed best—the second always salivates—an effect, by the way, for which no cause, I believe, has yet been discovered. Presupposing that a horse has a plenty of wholesome food and proper grooming, if you would give him a finer coat than these alone can produce, let half a pint of sound wheat or a small handful of brown sugar be mixed with his food, about once in every six or eight days, for a few weeks, and the object will be attained far better than by blanketing, which always makes him more liable to take cold, when exposed to bad weather, as he sometimes must necessarily be. On long journeys, in hot weather give your horse a double feed at night; in the morning travel sixteen or twenty miles before

you feed him again, then do it lightly and after he is perfectly cool. Give a few quarts of soft water both before and after his food, then resume your journey and go fifteen or twenty miles farther. This will enable you to stop early every evening, without any night-riding, and will give both yourself and your horses a long rest to recruit your strength. If your horse be sound, you may thus travel him hundreds of miles without danger of his failing.

"Farm horses may be kept in good order at much less expense; for they may be fed, *when unemployed*, upon any of the roots which it is customary to give them in England. In addition to these, we have the pumpkin and its varieties, all of which are good food for horses, but the seeds should always be taken out, as they are powerfully diuretic. If such food be at first rejected, horses may soon be taught to eat it, by mixing a little salt with it, and offering them nothing else for a few days. To this should be added, as soon as they will eat such a mixture, from thirty to forty pounds of chopped provender, for every twenty-four hours, and this may be made either of well cured corn tops, blades, hay, wheat, oats, or rye straw, or chaff. Corn shucks, (which is the southern name for the covering of the ears,) answer well to mix when chopped up, with the roots or pumpkins; if they are salted as they are put up and kept dry. Another very good long forage peculiar to our country, consists of the various kinds of Indian pea-vines. These make excellent food for farm horses, if exposed to the sun until they are somewhat wilted, then stacked in alternate layers with the straw of either wheat, rye, or oats, and each layer sprinkled with salt, as they are stacked. Thus fed and protected from bad weather by warm shelters, open only to the south, and well covered with any kind of thatch, or corn tops or loose straw, farm horses may be kept healthy and in good order throughout the southern States, without their owners incurring the expense of wooden or brick stables for them. Stalls, however, should be made for them under the shelters, with divisions high and close enough to prevent their fighting, and in those they should be tied while eating. Their mangers or troughs should be wider and deeper, than when racks also are used although *they* never should be, or lazy hostlers will be sure to avail themselves of them, if not closely watched. When put to constant farm work, horses should have only dry food, three times a day. It may consist either of bran, shorts, cob-hominy, ground rye, oats, broom corn, or oats mixed with chopped stuff in the proportions already mentioned—that is, about thirty-five pounds for horses of common size, and forty pounds for the largest. But after the grass is in plenty, and as long as it lasts, (if it does not salivate) they may be turned out of nights and rest-days, although if your pastures are large, more time is lost every morning in catching them and getting ready for work, than would amply compensate, if spent in farm labor, for the expense of keeping them up, especially should you have any grass to give them a moderate quantity in lieu of a portion of their dry food. To fatten a horse rapidly, his fodder or hay should always be chopped and steamed, before it is mixed with the meal of either corn, oats, or rye, and as much should be given him, three times a day, as he will eat without leaving any. Give him also salt alone as often as he will eat it, and soft water at least thrice a day, but always with some meal of either of the above mentioned grains stirred up with it. A small quantity of ground Indian peas will add much to the nutritive properties of his food; and thus treated, with moderate daily exercise, in good weather, the process of fattening will soon be completed, provided the horse be in health at the commencement.

FENCING MACHINE.

The Editor of the New York Mechanic speaks of an improvement in the shape of a fencing machine, which will enable the workman to afford a very superior fence at a much lower rate than the ordinary price of the common post and rail. He thinks it will soon be as common for a farmer to apply at an agricultural warehouse for this fencing as for his ploughs and axes. Although well aware of the vast amount of labor that may be saved by well constructed machinery, we doubt very much if it can ever come into competition with southern labor, which is either employed at this work during the winter months or idle altogether, especially, when the cost of transportation and the city value of timber is to be added. For these reasons, this is the last subject to which we would have thought of applying any machinery, except that which could be worked by every farmer on his own plantation. The subject, however, is one of vast importance, and we should be glad to hear farther particulars of the improvement.

KEEPING CATTLE WARM IN WINTER.

When I commenced farming, I prepared a good barn-yard, inclosed with a close fence, and a well of water therein, covered with a shed. I used to turn out my cattle in the morning, and suffer them to remain out all day, unless there was a severe storm. The cattle were fed at noon with some coarse fodder spread on the snow in the barn-yard, or in racks under the shed. A plentiful supply of water was kept constantly in a trough in the yard. Now, sir,

for years I thought that this was the best way I could manage. I have since adopted a different course. My cattle are fed several times in the morning, and carefully carded; and at about nine o'clock are turned out to water. While the cattle are drinking, the stalls are cleaned out and littered, and in about one hour the cattle are again tied up. If the weather is stormy or very cold, they are permitted to return to their stalls as soon as possible; but if the weather is mild, they are suffered to remain out longer, but not more than two hours. They are fed in their stalls several times during the day, always giving them little at a time. In the afternoon they are again turned out and watered, and suffered to remain out as long as in the morning. The stalls having been again cleaned out and littered, the cattle are again tied up for the night. Great care is taken to make the barn warm. When the weather is cold, the doors and windows are closely shut. In this way the cattle being more comfortable, are kept at much less expense, and thrive better. A cow will give more milk when kept warm than when exposed to the cold. Every farmer knows that cattle eat more in severely cold weather; and, notwithstanding, then cows give less milk. Few farmers take sufficient care to protect their stock from the severity of the weather. Hogs, also, give more on the same food, when kept warm.

Wm. A. Hayes.

S. Berwick, Me., Feb. 18, 1841.

New England Farmer.

A HOMINY MORTAR.

To some people, a hominy mortar may be a small matter, but without a mortar, there can be no hominy, and every body knows what that is to a Virginian. It is the national dish, the favorite alike of master and of slave. We doubt very much if a Virginian does not derive those characteristics, which are peculiar to him, from his devotion to hog and hominy; so that, although, abstractedly, a hominy mortar is nothing, relatively, it is every thing; and we return our profound thanks to Mr. Fontaine, who has not considered this matter beneath his notice. How the negroes will grin at the idea of a white man's making a hominy mortar! The only difficulty we have about the matter is in the belief we had entertained, that the subject did not admit of improvement. Mr. Fontaine, however, is a true Virginian, and, we warrant, a connoisseur in the article. A sample out of this new implement might satisfy us that there is room for improvement, even in HOMINY MORTARS.

To the Editor of the Southern Planter:

Dear Sir,—I send you two contributions to your paper—my dollar for the present year and the following description of a hominy mortar—an implement of household comfort, I have found by no means easy to construct upon the old-fashioned plan of burning a hole in one end of a log; and as hominy is peculiarly a Virginia dish, you may possibly spare enough room in a corner of your paper for its admission.

Let a piece of timber, of sufficient size, be split through the middle with a whipsaw, three feet, and then sawed off—describe with a pair of compasses the cavity you wish to make on the two sides just divided with the whipsaw, and when hollowed out with a foot-adze and gouge, you have only to put the two pieces together and you have the hominy mortar. To confine them together, have two bolts going through the solid end, with a screw and tap at one end and a head at the other; and on the upper or hollowed end put an iron hoop.

Respectfully, E. Fontaine.

PROFITS OF AGRICULTURE.

Suppose you were to tell an individual on the look out for an investment of capital, that you could point him to a business, peculiarly adapted to the natural resources of the country, in which, the demand was greater than the supply, and which was conducted in a very imperfect and slovenly manner, would he not exclaim, here is an opportunity for investment which I shall certainly embrace; and may not all this, and more, be said for the pursuit of agriculture in this country, at this day?

Whilst the professions, as they are called, are confessedly overburdened—whilst there is more talent brought to them than is required, such is certainly not the case with agriculture. All admit, that talent has been diverted into other channels, and we repeat, there never was a finer opening for the exercise of it than this pursuit now affords. Men seek, every thing else equal, those pursuits in which they will meet least competition. When the supply is not greater than the demand, the cost of production regulates the price, that is the cost of production to the great mass. If, then, in any business, the mass are unskilful and ignorant, the price is always far above the rate at which an individual of skill and information can afford it. Of necessity, he gets rich, under such circumstances. Wheat, tobacco, and the growth of the earth in general, are not produced in the cheapest manner; consequently their price is far above what skill and ingenuity can afford them at, and we

have demonstrated the proposition with which we started, that their cultivation offers a fine field for the exercise of those qualities.

We do not mean to say that men of talent are not engaged in the pursuit of agriculture—far from it; but we do mean to say that they do not devote their talents to it. Why and how is this? We will endeavor to explain. Agriculture is partly mechanical; that is, a great many operations, upon which its success depends, are purely mechanical; and a most unjust and fatal prejudice exists against mechanical employments.

Of the different pursuits of life, all require the exercise of certain proportions of mind and body. These proportions differ in different occupations; some requiring much mental and little physical effort, and others uniting great physical exertions with small mental exercise. We naturally and properly admire more the efforts of mental, than physical, skill—hence, as all men are ambitious, those pursuits are most like to be overburdened, which are of the latter class. But although those occupations, requiring most of the mental, are most prized, we doubt very much whether wisdom would lead us to their pursuit. We believe that mankind are so constituted, that the greatest happiness is afforded by those employments, that exercise a due proportion of the mental and physical faculties, with which we are blessed. Of this character, is the pursuit of agriculture. The mental labor, which it most powerfully calls forth, is relieved by the bodily exercise which is equally necessary to its prosecution; and health and happiness are the result. We believe, that no occupation is healthy, (and without health, there can be no happiness) which does not allow, aye, require, a large portion of physical exertion: indeed, nothing is so well calculated to increase and cherish mental vigor as bodily exercise: the health of the mind is extremely dependent upon the health of the body. Away then with the absurd and ridiculous prejudices against occupation, combining high mental, with a certain degree of physical exertion. Such are the callings for which the God of nature intended the best of us, and it is from such, you may always select those specimens, conferring the greatest honor upon human nature.

But, unfortunately, these evil spirits, as they did not come at our calling, will not vanish at our command. They are the offspring of pride and folly, and upon no pursuit in life do they exert a more baneful influence, than upon agriculture.

If we are right in saying that the pursuit of agriculture is in a great part mechanical, it follows of course, that he who pursues it, should be, in spite of prejudice, a MECHANIC. Where is the farmer who is a mechanic? Where is the farmer who thoroughly understands the simple tools that are even *now* required in his profession? What avails it to him to be chock full of *science*, if he knows not how to apply it? Can he teach his servants how to handle the tools of his trade? Can he learn one to spade, another to plough, or another to reap? Does he even know whether his dependants are skilful or not? Many that we have seen did not even know when their tools were in order, and full of *learning* they were working at the greatest possible disadvantage.

A farmer in Virginia has a smart, likely negro boy, of twelve or fourteen years of age, and he wants to make a ploughman of him. What does he do? He tells old Jim, that he must learn Joe to plough. A proper teacher truly! Is he not aware, that if he knew how to plough, himself, that he could teach Joe more in an hour, than Jim would learn him in a year?

The mechanical knowledge of which we speak is, in the present retarded state of agriculture, of an inferior degree, easily acquired, but absolutely necessary to the successful prosecution of the art. It is much more rare than the *science* of agriculture, and not a whit less important. You will find ten men that *read*, for one that *practises*. How is this to be remedied? Instead of filling the ranks of agriculture from the trained off of other professions, men who have devoted their best and earliest days to other callings, train your children to this profession, as you would to any other. Select your finest boy, he will find verge and scope enough for any talents he may possess, and make a FARMER of him—induct him into the practical details of his business. Teach him, that in no profession is time more precious; learn him to rise with the lark, and remind him that every moment he loses is multiplied by the number of his dependants; let him thoroughly understand the laborious mechanical operations, upon which his success so much depends, and then, will he be ready to avail himself of labor-saving machinery, by which those labors can be so much

abridged. In addition to all this, give him a liberal education, and then will he be prepared to study the *science* of his profession—then will he be enabled to detect the errors into which the mere chemist is daily falling for want of practical knowledge—then will he by the application of mind to agricultural *facts* draw the art from its present obscurity into the broad day-light of glorious science.

ALPACA.

The Alpaca is a species of the Lama, and indigenous to the mountains of Peru, in South America. Its valuable properties are attracting great attention in England, where attempts are being made for its domestication. It is described as most beautiful in appearance, its flesh more highly flavored than venison itself, and the hair of a quality between silk and the finest wool. Many splendid articles are made from it, almost equal in beauty to the far-famed fabrics of Cashmere. The animal is represented as being much more hardy than the sheep, and affording the farmer, every two years, a shearing of its fine and silky coat, without requiring any attention at his hands. About eighty of them are now in England, and no doubt seems to be entertained of their adaptation to the mountainous regions of Wales and Scotland. Indeed, they are quite the fashion, at present, and we are told that, "In 1811, when Mr. Cross exhibited his first Alpaca in London, the late Lady Liverpool repeatedly went to see it, and so much was she delighted with its beauty, the softness and brilliancy of its coat, and its animated and beaming features, that she kissed it, as if it had been a child, and had it turned loose on her own lawn, in order that she might witness its movements when freed from restraint."

Several manufacturing houses in England are preparing to make large importations of the wool, the manufacture of which they find extremely profitable. We are very happy to hear that some enterprising gentlemen of our own State have sent out orders, through our new Charge d'Affaires to Chili, for some of the finest specimens of this valuable animal, for the purpose of establishing it in the mountains of Virginia; in whose temperature and bountiful herbage, we hope they will find a satisfactory substitute for their native homes. Their arrival in the city of Richmond may be expected during the spring.

HOW TO MAKE GOOD COFFEE.

The question is often asked, why it is, that good coffee cannot be procured in this country? The reason is simply this: coffee is spoiled in the burning, and sufficient care is not taken in preparing it for the table. To make coffee equal to the French is very simple, and very easy, and for the benefit of all good housewives, and all lovers of good coffee, we will state the manner in which it should be done. First, procure the best coffee possible. See that your cook does not *burn* it, but roast it to the color of a golden brown, and never allow it to remain in its burnt or roasted state for more than three days, as after that time it will lose its strength. Secondly, in lieu of the ancient method of *boiling* your coffee for an hour or more over a hot fire, and then being obliged to settle it with such rarities as *fish-skin, egg-shells* and the like, procure a *biggen*, as it is termed, and make a distillation or decoction by putting the coffee in the apartment in which the strainer is, and turning thereon *boiling hot water*. Take care that the nose of the coffee-pot has a stopper to prevent the steam from escaping, and cover the top of your *biggen* immediately after having turned the water upon the coffee; as it is a most important requisite to have the steam confined. Judgment is also to be used, as to the amount of coffee required, and also as to the quantity of water to be used. The best coffee may be spoiled by too much water applied to it. The coffee should be made very strong; and if strong enough, its color will be quite black. Lastly, having made your coffee of great strength, do not use *hot water* to dilute it, but in lieu thereof, take boiling hot milk, and weaken the coffee to your taste. By following these directions you will have as fine a cup of coffee as can be made in any country.

The time required for making coffee in this manner, is but a few minutes, the coffee being made as fast as the liquid issues through the strainer.—*Daily Times.*

We endorse the above without any kind of hesitation. The formula has been long ago adopted in our culinary department, and the result has been such as to give entire satisfaction. Nothing but a reverence for the customs of antiquity could obstruct the progress of patent coffee-pots. Now, we have a fondness for old things, ourselves, always excepting old eggs and old butter, yet is our morning cup of coffee an item of too much importance to be sacrificed at the shrine of antiquity.

We beg leave to remark, that the addition of boiled milk is altogether a matter of taste. We ourselves prefer to substitute a couple of spoonsful of thick cream.

HOUSE PAINTING.

We shall give general and full instructions in the arts of house painting, and carriage painting, when we have completed those of "Landscape Painting on walls of rooms."

We copy the above from that most excellent paper, (which by the bye no mechanic should be without) the "New York Mechanic." We have endeavored, heretofore, to impress upon our readers the advantage and economy of a more general use of paint. We promised, moreover, to give some simple directions for its preparation and management. We were about to redeem that promise, when our eye fell upon the paragraph at the head of this article. Recognising at once the superior ability of our cotemporary to do justice to this subject, we resolved to await his instructions, and adopt them instead of our own. May we respectfully request our friend, that, in addition to the rules that he may lay down for the use of artists, he will be pleased to furnish the public with some simple directions for mixing and laying on, that will enable any man, who can handle a brush, to paint his own gates, implements, &c.? By complying with this request, he will add another to the long list of favors he has already conferred upon the agricultural community.

COMPOST.

We believe that no vegetable matter that will form a covering for land should ever be hauled into the farm pen, but there is much of it unsuitable for such purpose; all such should, undoubtedly go into the compost heap, along with the muck, mud, dirt, and stable manure. For the management of such a heap, we have the following directions from professor Jackson. We should be careful to add the lime whenever any symptoms of fermentation are perceived.

"When we compost together, through the winter, peat, swamp muck, rotten wood, or any vegetable matters, with barn-yard manure, and in the spring season we mix into the heap, about three weeks before we intend to use the compost, some recently slacked lime, (or, if that is not to be had, some unleached ashes or potash will answer,) we generate, from the decomposition of the animal matters, an enormous quantity of ammonia, which will be absorbed by the vegetable acids, and the manure will be powerfully augmented in strength and value.

"The proportions in which peat or swamp

muck and stable manure have been employed on a large scale, successfully, are as follows:—Three loads of swamp muck or peat and one load of stable or barn-yard or any animal manure.

"These are made into a compost heap, and are allowed to ferment over winter, or long enough for decomposition to commence.

"In the spring season, one cask of recently, slacked lime is to be carefully mixed in while digging over the heap. The lime extricates the pungent, gaseous alkali ammonia which penetrates every part of the compost heap and neutralises the organic acids, forming valuable soluble compounds."

From the Farmers' Cabinet.

HANDLING.

How few of us ever think any thing about the *quality* of an animal, if it only please the eye; and how little did I myself know or care for this distinctive property until the perusal of the excellent article at page 363, Cabinet, Vol. V. by that spirited and first-rate judge of cattle, W. H. Sotham. In the article above alluded to, Mr. Sotham has said, very properly, it is absurd for a man to form a correct idea of the quality of an animal by the eye alone, that is ascertained by the *hand;* and as the handling is the governing point in purchasing with all graziers and butchers, breeders also should look to that point. I find some excellent observations in Culley on this very important subject. He says:

"We undoubtedly first judge by the sight, which, being pleased, we then bring the sense of feeling to its aid, and, if this also approves, we conclude that the animal suits our purpose, or is answerable to the idea we have formed of it. A nice or good judge of cattle or sheep, with a slight touch of the finger upon the fattening points, the hips, rump, ribs, flank, breast, twist, shoulders, core, &c. will know in an instant whether the animal will make fat or not, and in what part he will make fattest. I have often wished that I could convey in language that idea or sensation we acquire by the touch or feel of our fingers, which enables us to form a judgment when we are handling an animal intended to be fattened; but I have as often found myself unequal to fulfil that wish. It is very easy to know where an animal is fattest that is already made fat, because we can feel a substance or quantity of fat upon all those parts which are denominated *fatting points;* but the difficulty is to explain *how* we know or distinguish animals in a lean state which will make fat, and those which will not, or, rather, which will make fat in such and such points or parts and not in others, which a person of judgment, and in practice, can tell instantly—I say *in practice*, because I believe that the best judges out of practice are not able to judge with precision. We say 'this beast *touches* nicely on the ribs, hips,' &c. because we find a mellow, pleasant feel on those parts; but we do not say *soft*, because there are some of the same sort of animals which have a *soft*, *loose* handle, of which we do not approve, because, although soft and loose, they have not that *mellow* feel above mentioned—for although they *both* handle loose and soft, yet we know that the *one* will make fat and the *other* will not; and in this lies the difficulty of the explanation. We clearly find a particular kindliness or pleasantness in the feel of the one much superior to the other, by which we immediately conclude that *this* will make fat, and the *other* not; and in this a person of judgment, and *in practice*, is very seldom mistaken."

P.

For the Southern Planter.

It is with much satisfaction, Mr. Editor, that I have observed your efforts to establish an agricultural journal, in the metropolis of the Old Dominion, and with more, that they have been successful. To render an agricultural journal emphatically useful to the farmer, every one, engaged in this occupation, who writes legibly, and spells so as to be understood, should circulate any useful information he may have gathered from long observation and experience. Mind acting upon mind speeds on improvements; and an interchange of opinions, is the quickening spirit of agriculture.

With motives such as these have I sat down to give you my mode of moving some kinds of trees, which are difficult to transplant successfully, in the ordinary way. Some of the most beautiful trees for the yard or an avenue, are to be found in the forests of Virginia. Amongst them, the yew, the holly, the oaks, the ash, the locust, the sycamore, the red bud, and the American tulip tree. I have met with the greatest success in transplanting all these, more particularly that beautiful evergreen, the holly, by adopting the following mode:—I select the most beautiful and flourishing trees from five to twelve feet in height, and about the last of the fall, or during winter, when the ground is soft, and before very cold weather, have them dug around in a circular shape. This circle must vary from four to seven or eight feet in circumference, according to the size of the tree. You dig your trench about a foot straight down, then incline the spade towards the tree, and dig a little deeper, so as to have the lower circumference much smaller than the upper. The circle or ball of earth left to the tree being neatly dressed, leave it till there happens a freeze, when you will find your tree ready for removal. A coarse, strong sleigh frame, with plank placed across it.

is the best conveyance for removing the tree and its balls, should there be snow on the ground—if not, an ox cart, though not so convenient, will answer your purpose.

Your ball of earth being hard frozen, prize it up on one side with a lever, and pass under it an ox-chain, which hook about half way from the circumference of the ball and tree—do the same on the opposite side, then thrust two strong poles, ten or twelve feet long, through the chains, one on each side of the tree, and several strong fellows will be able to lift it out of its place, and deposit it in the sleigh or cart. By the aid of two strong planks reaching from the back of the cart or sleigh to the hole previously dug, you may easily slide the ball and tree to their new place of abode. This is of course a slow mode of adding trees to your avenue or yard; but it is almost in every case successful—and is accomplished at a period of the year when labor is cheap. Thus may you remove hollies, yews, the American tulip tree, and the oaks, all beautiful and highly ornamental, but rarely surviving transplanting in the usual way; or if they do, in so crippled a state that you can barely observe an increase of size in a series of years.

By the method above recommended, told in a bungling way, but I hope understandingly, the forest may be robbed of many a beautiful tree, so cunningly, that it grows on, not aware, so to speak, of the change in its condition.

There is perhaps no object of inanimate nature, more beautiful than a fine tree. Even seen on a foreign soil, it imparts a pleasure which no other growing thing of the kind can give. The unfolding verdure of its leaves, its fruits, or its shade, produce associations and reflections in the enlarged mind, which are virtuous, and therefore agreeable. How much greater then the delight of cherishing a tree planted by the hand of a beloved ancestor, or one planted by yourself and growing into treehood, under your fostering care.

One of the best and greatest of men, Sir Walter Scott, took great delight in planting trees. Not long before his death he had the satisfaction to learn from the lips of a nobleman of England, that to a remark he met with in one of Sir Walter's novels was he indebted for a fine grove of oaks, then in a flourishing condition. In recommending the planting of trees, Sir Walter says, "while you sleep the tree will grow." Let no man, then, be influenced by selfish considerations, when his better nature prompts him to plant a tree. Life is ever on the ebb and flow—to-day we may transplant a tree—to-morrow we may be growing cold for the grave; yet stay not thy purpose—it may do good; some kind successor may bless thee for it, and watch its growth with pleasure. My love for trees may lead me to enthusiasm on the subject, but I believe the luscious fruit, the graceful shape, or the cool shade of a tree may arouse in the heart of a fellow-creature emotions so vivid and touching as to calm excited passions, or soften unkind or bad thoughts.

The planting and taking care of trees, is at any rate, Mr. Editor, part of the farmer's calling. But it is not sufficient that your tree be dug up and put in the earth as you insert a post. Far from it: *take up the roots of the tree as well as the body;* and this do with care. The fibrous roots supply a "removed tree," at any rate for some time, with food, and one must be careful not to injure them. The only certain mode to avoid this is, to have two hands, each with a spade, who should insert their spades on opposite sides of the tree, prize them up a little, then move half-around; repeat the operation, while a third person gently pulls up the tree; which will be found to have attached to it all the young or fibrous roots. The hole to receive the tree should, if practicable, be previously dug, and larger in size than the extent of the roots. Plant it about an inch deeper than it grew, and as the earth is thrown upon the roots, arrange them neatly, and as nearly as possible as they grow. Give your tree a stake, to which attach it with a nail, by a piece of leather an inch broad, and a few inches long. Cultivate the ground about your trees in potatoes or peas, and cover the earth around them with chaff, saw-dust, or rotten wood, which will keep the roots shaded and moist. Many young trees are killed by a stroke of the sun—and shading the roots the first year or two, is all-important. Keep your tree pruned, and curtail the longest horizontal limbs so as to give it a good body and a round head.

With well wishes for the success which the "Southern Planter" so well deserves, I am, with respect, Yours, H.

Port Royal.

MANURE.

To the Editor of the Southern Planter:

Dear Sir,—Manure has been very justly styled the "Sheet Anchor of the Farmer"—as such, I esteem it. Every well directed effort, therefore, to improve the *quantity* and *quality* should be regarded with interest by intelligent and enterprising farmers. I shall attempt, in as plain a manner as I can, to throw out some hints by which both the *quantity* and *quality* of manure may be greatly improved. Farmers should make their stable floors where horses or other animals are kept perfectly tight so that none of the urine would pass through them, and they should elevate the floor a little, next to the manger, that the urine may flow out; fix underneath the lowest point of the floor, a gutter or conductor to receive the urine, so constructed as to convey it to a *reservoir*, prepared to receive it, which must be well sheltered, and protected from the weather. The *reservoir* may be made of timber

or of bricks. If of the latter, it should be well plastered inside with hydraulic cement, to make it tight. Let the solid excrements, with the ordinary cleanings of stables, be thrown into this reservoir, with the liquid; put also, for every layer of the solid excrements of a foot in thickness, a thin layer of plaster of Paris. I will briefly state my reasons for recommending this plan. The liquid excrements are of much greater value than the solid; as stable floors are generally constructed, the whole of the liquid is lost, except what is absorbed by the solid excrements and the litter.

It is the liquid excrements alone, which enables the solid excrements to emit ammonia, which being thrown out in the usual way, unprotected from the weather, the moment putrefaction takes place the ammonia escapes into the atmosphere, in the state of carbonate of ammonia and is lost; the other soluble salts are washed out by the rain; the remainder is of but little comparative value. The plan proposed has this advantage, first, a saving of all the urine, (any one who may practice this plan effectually, will soon be astonished at the quantity of urine made by animals, which he has heretofore lost); secondly, protection from the weather; and thirdly, all the ammonia will be retained. Plaster of paris being the sulphate of lime, will convert all the carbonate of ammonia (which is very volatile) into the sulphate of ammonia, which has no volatility; thus the whole value of the manure is retained for the use of crops. Having been engaged for the last six months in manufacturing chemical manures from human excrements, I have been compelled to turn my attention to the study of agricultural chemistry, I can, therefore, with *confidence* recommend the above plan to your numerous readers. Manure, made in this manner, will be vastly superior, perhaps ten times as valuable as that made in the usual way. I am making an interesting experiment upon wheat with urate, and in the spring I shall make an experiment with poudrette and bone dust on corn.

The results I will make known in due time to my brother farmers through your journal.

Very truly yours,

GEORGE WOODFIN.

Richmond, Jan. 12, 1842.

Mr. Woodfin, from the official station which he fills, has a most excellent opportunity of experimenting upon urate and poudrette, which are exciting so much attention in the agricultural world. This opportunity, we are pleased to hear, he has improved in a manner as creditable to himself as beneficial to the community. We are very happy to add his name to the list of our correspondents, and will look with much interest for his promised communications.

HENRICO AGRICULTURAL SOCIETY.

At a meeting of the Executive Committee of the Henrico Agricultural and Horticultural Society, held at the Capitol on the 8th day of January, 1842—present, J. H. Turner, Jos. Rennie, William D. Wren, and William H. Richardson, the following were determined upon as the subjects for and amount of the premiums to be awarded at the third exhibition of the Society, to be held on the 25th May next:

For the best brood mare for domestic purposes,	$10 00
For the best mules raised by the exhibitor,	10 00
For the best horse colt or filly, not exceeding two years old, raised by the exhibitor,	10 00
For the best bull of the imported improved stock,	10 00
For the best cow of the imported improved stock,	10 00
For the best heifer of the imported improved stock,	5 00
For the best bull of native stock, raised by the exhibitor,	10 00
For the best cow of native stock, raised by the exhibitor,	10 00
For the best heifer of native stock, raised by the exhibitor,	5 00
For the best oxen, raised by the exhibitor,	5 00
For the best boar, of the improved breed,	5 00
For the best sow and pigs, of the improved breed,	5 00
For the best boar of native breed,	5 00
Do. do. sow and pigs do. do.	5 00
Do. do. fatted beef, raised by the exhibitor,	5 00
For the best buck,	5 00
Do. do. ewes,	5 00
Do. do. specimens of early fruits,	5 00
Do. do. 2d do. do. do.	2 50
Do. do. specimen of rare and beautiful plants and flowers,	10 00
For the second specimen of rare and beautiful plants,	5 00
For the best market garden, not less than an acre,	20 00
For the second best market garden, not less than an acre,	15 00
For the best specimen of vegetables, regard being had to variety as well as quality,	5 00
For the second best specimen of vegetables, regard being had to variety as well as quality,	2 50
For the best specimen of domestic wine, not less than one gallon,	5 00
For the best specimen of domestic silk, not less than one pound,	5 00

For the best specimen of butter, not less than five pounds, - - - 5 00

For the best suit of clothes of domestic manufacture, - - - - - 10 00

For the best plough, to be exhibited in actual operation with dynamometer, at the expense of the exhibitor, - 10 00

For the second best plough, to be exhibited in actual operation with dynamometer, at the expense of the exhibitor, 5 00

For the best corn sheller, - - 5 00

Do. do. cutting machine, - 5 00

Do. do. threshing machine and fan, 10 00

Do. do. specimen of farming tools, axes, spades, hoes, - - - 5 00

For the best specimen of worsted work, intended coverings for chairs, ottomans, hearth rugs and shade mats, - 10 00

For the best lot of three shirts of the neatest workmanship, - - - 5 00

For the best essay on root culture, 5 00

Do. do. on making, preserving and applying manures, - - - 5 00

For the best essay on the cultivation of grass, - - - - - 5 00

Resolved, That the Executive Committee, with Mr. Charles T. Botts attend the first exhibition of the Hanover Agricultural Society.

We hope that our readers will remember that these premiums are open to general competition, and that many of them will grace the coming fair with their presence, not only as spectators, but as competitors.

The successful candidate not only secures the amount of the premium, which is a small matter, but he enjoys the honest satisfaction of having outstripped his competitors in a noble race; moreover, he gains for his production a reputation it can acquire in no other way, and this may, under certain circumstances, be a matter of vast importance in a pecuniary point of view.

Exhibitions of this kind are always interesting; but those of the Henrico Society, held as they are, in the metropolis of the State, animated and enlivened by the presence of its inhabitants, presents a spectacle of the deepest interest to the eye of a farmer, and never fails to repay him for the trouble of a distant visit. The coming fair is already the common topic of conversation, and great preparations are making for its arrival. We venture to say, that it is fated to throw the preceding ones, interesting as they were, completely in the shade. He, who is absent from Richmond on the 25th of May, 1842, will have much to regret.

VIRGINIA FARMING.

Our attention has been called to a very interesting letter from Mr. "Simon Brown" to the Editor of the Farmers' Visitor, giving an account of a tour, made lately by the aforesaid Mr. Brown, through a portion of the Old Dominion. Mr. Brown speaks rather slightingly of our system of cultivation; now, although we take the liberty, occasionally, of rating our own people roundly for their carelessness and inattention to their business, that is no reason why we should stand by and permit a stranger to do so with impunity.

We had gotten thus far, quite nettled with the aspersions thrown upon our good old State, and determined to refute, and punish the asperser; for this purpose we re-read Mr. Brown's communication, and really there is so much of justice, and withal of liberality in his observations, and what he has to say, he says so well, that we have concluded e'en to pocket the affront. But if we are compelled to bottle the wrath we had prepared for Mr. Brown, it shall be only to pour it out upon the heads of our own citizens, who render our State the subject of such disparaging remarks. In the first place, we arraign all ye, (alas! your name is legion,) who have made us powerless to deny the truth of the following imputations:

DEFICIENCY OF COMFORT AT THE SOUTH.

With all the advantages, however, of a most generous soil, and a mild and genial climate, with good markets for all the produce they can spare, the planters through all the South lack many of the comforts and elegancies of life which are a *common* blessing throughout New England. Their houses are in the first place loosely constructed, and there is generally a carelessness about making the necessary repairs, which gives them a dilapidated appearance, in one or two years after their erection. During the short, but frequently severe cold weather, they are cheerless and uncomfortable tenements. They seldom have barns, and what I believe is still more rare, wood-houses. The consequence is, in regard to the want of the first, that their stock requires much more feeding than would be necessary if housed during the long, cold storms of rain, hail and snow which always prevail in the winter, and then come out lean in the spring, and unprofitable for milk or labor. But the wood-house, which to the thrifty New England housewife is deemed indispensable, cannot be expected, where the animals themselves are denied a shelter. The want of it, however, is often a source of vexation, and is bad economy.

On many plantations the wood is brought up from time to time, just in sufficient quantities to afford a scanty supply, and used in its green state—or, if collected in considerable quantities, suffered to lie exposed to all weathers, and consequently much of the time unfit for use. But particularly as regards many of their domestic arrangements—that peculiar methodizing, and those thousand nameless comforts and conveniences which give home an air and delight above all other places, there seems to be an indifference which is altogether inexplicable. And this is often the case where there is wealth sufficient, not only to ensure the comforts of life, but to introduce the graces themselves. But in the improved mode of husbandry abroad, which shall bring neatness and method into the corners, and under the fences, of every field, we may hope to see a corresponding improvement in the out-buildings, as well as the kitchen, dairy and parlor. To make note, however, of all to which my observation extended, would, perhaps, make my remarks out of place in your paper, and occupy too much of your space.

But "all is not evil." Mr. Brown pays the following handsome compliment to a gentleman, with whom, in former days, we were slightly acquainted; and who, we doubt not, deserves all, and more, than he has received. We say *more*, because, Mr. Brown, with an ignorance that is excusable, seems to expect a farm of fifteen hundred acres to come up to the standard of a New England onion patch. Now, this we apprehend would be neither practicable nor profitable. Northern men, who have *settled* amongst us, have long ago discovered, that the system, that was adapted to a few acres of root crops, was by no means applicable to the cultivation, on an extended scale, of our great staples, of corn, wheat, tobacco, &c. The inevitable accumulation of our labor forces us to cultivate extensively, and there are many peculiarities, flowing from this circumstance, invisible to the eyes of a stranger. We certainly do not mean to insinuate that there is not great room for improvement, but we do mean to deny, that it is practicable to cultivate a farm like a hot bed.

A NOBLE EXAMPLE.

Travelling through Fairfax, into Prince William county, I sojourned three days at the hospitable mansion of Alfred Ball, Esq. Here I found myself upon one of the old Virginia plantations, with all the substantials about me which go to make life comfortable and happy. His homestead consists of about fifteen hundred acres, containing all the varieties of soil common in that part of the State, and watered by the Bull Run river, which flows nearly through the centre of the estate. His house, a model of the old Virginia, palace-like mode of building, stands upon a gentle eminence, overlooking every part of the plantation. Around it is a handsome area, planted with fruit trees and shrubbery, among which are interspersed numerous bee-hives. About one-half of this estate fell to Mr. B. by inheritance, and while walking over a large tract on which the new, thickset clover had almost hid the ground, he informed me that when he came upon it there was not a field which would produce crop enough to pay the expenses of cultivation. When his determination to cultivate it was made known, his friends remonstrated against such a step, and predicted starvation as the result. But with most commendable ambition he told them he had an irrepressible desire to restore what had been lost upon the lands of his ancestors, through neglect partly, and the want of a proper knowledge of the true modes of husbandry; and that he could not sit down and appropriate the labors of others, with their improvements and results, with that satisfaction and contentedness which he fancied he should realize, after overcoming the difficulties which surrounded him by his own energies and industry. How nobly he has succeeded—how the once barren waste now pours into his lap the full reward of all his labors and cares, may be seen by a ramble over portions of his plantation. Still, it must be borne in mind that this is Virginia improvement, and will not bear contrasting with a well managed New England farm. It will be noticed by the remarks which follow, that, notwithstanding he considers himself amply repaid, by the crops produced, for any extra labor bestowed, the capabilities of the soil have been nothing like fairly tested.

Mr. Ball cultivates only about four hundred acres. One hundred he plants with corn, the average yield of which is twenty bushels to the acre. He usually sows one hundred and fifty acres in wheat, the average crop of which is not over five bushels to the acre; seeds a bushel and a peck. On these crops, with the other necessary labor of the plantation, eight efficient men, six horses, and three yoke of oxen, are employed. There are no stones. Immediately in front of his house he has enclosed a field containing one hundred acres. This he calls his pet field; and is to be thoroughly dressed and tended in future, in preference to every other part of the farm. Here he has commenced the new system of cultivation, in which he expects to be greatly aided by a careful perusal of the Visitor, of which he is a subscriber. He reasons in this manner. He now seeds one hundred and fifty acres with wheat, and obtains five bushels to the acre, and an aggregate of seven hundred and fifty bushels. Now, he says, if by extra dressing and labor he

can increase the crop to fifteen bushels to the acre, (and of which there can be little doubt,) there will be an aggregate of two thousand two hundred fifty bushels, and a net gain of *fifteen hundred bushels*, or nearly so, taking into the account the value of the extra quantity of straw. Now if this reasoning be correct, and I have no doubt the result would prove it so, it shows at a glance the great importance of cultivating a less quantity of land, and of bestowing upon that more than all the labor which has been bestowed upon a much larger quantity. The same process will hold good with respect to all other crops as well as that of wheat. Mr. B. will open an account of debt and credit with this field, and such minutes as will show the cost and kind of dressing, the amount of labor expended, the ploughing, harrowing, seeding, time of planting, sowing, reaping, &c. of all of which he has engaged to furnish me a paper, which shall be forwarded to you in due time when I receive it.

We are glad to see this "Ball in motion," but hope he will find no necessity for rolling himself into New Hampshire, whilst he has the opportunity we shall be happy to afford him of unfolding himself nearer home.

Mr. Brown went down into the Northern Neck, and speaks in glowing terms of the timber he found upon the banks of the Potomac. He declares that, although not so extensive, the forests are not less thickly covered than the celebrated timber districts in the State of Maine, with which he professes to be well acquainted. He does not however leave this region without hitting us another hard lick; hear him:

VIRGINIA FARMING.

Leaving the river, and travelling nearly south, I passed through extensive timber forests on bottom lands, which, when cleared, prove of the best quality. On my way lay a plantation belonging to a nephew of Col. Taliaferro, the present member of Congress, but now occupied by a Mr. Brown. On this plantation seven thousand bushels of corn and fifteen hundred bushels of wheat have been raised this season. A few miles farther south I tarried two or three days on one of the plantations of Dr. —— Murphy, a gentleman of much agricultural as well as medicinal skill, possessing vast landed estates, and who has set an example which is already working a revolution in the modes of husbandry in the section of country in which he resides. As the land is generally flat, and consequently wet, he is ditching round large tracts of "old fields," fencing, manuring and ploughing, and endeavoring to bring them back to vegetable life, and is determined no longer to act upon the principle which always *takes* but never *gives*. What is uncommon, he has a fine barn and granary, a garden handsomely laid out and well tended, and a thrifty orchard. The house, a neat cottage, overshadowed by lofty locusts, and standing nearly in the centre of a field of corn containing one hundred and fifty acres, has a most quiet and inviting appearance. From this point, fields beyond fields rise to the sight,

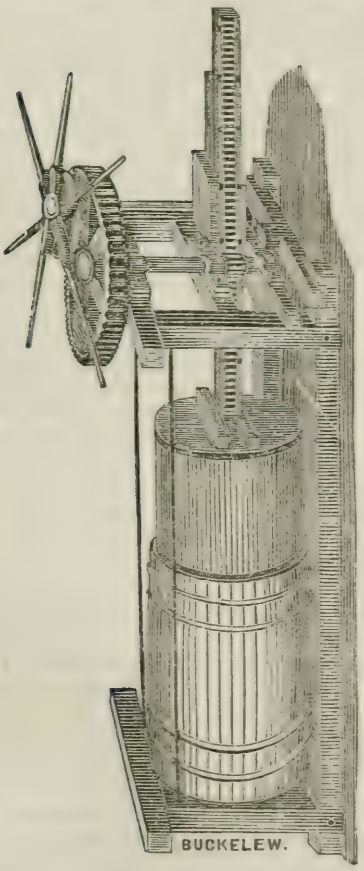
> "Far as the circling eye can shoot around,
> Unbounded tossing in a flood of corn."

Every planter I conversed with in this region stated to me his conviction that their system of farming is wrong; that they attempt to cultivate too much—that their lands are rapidly becoming, or have already become, impoverished, and that they do not understand the method of renovating them, and that each succeeding year brings less and less under their present practice. Melancholy as is this picture, the whole aspect of things, as you travel through much of Virginia, Maryland, and probably all the southern States, proves it to be true. Thousands upon thousands of acres lie in "old fields," lands which have been worn out by successive crops of corn and tobacco, with scarcely the appearance of verdure upon them, not affording even a pasturage for sheep worthy of the name. My host informed me that if his field brought him fifteen bushels to the acre he should consider it a good crop! The land is a light, sandy loam, and is as capable of producing fifty or sixty bushels to the acre as fifteen, if rightly cultivated. A new impulse, however, has been infused into many minds. Agricultural papers are sent for—compost heaps are gathered—lime, plaster, and ashes are introduced, and a spirit of inquiry is abroad in the land. But experiments will be combatted by ignorance and prejudice, and many years will elapse before their fields will be divided into "convenient lots,"—their fodder housed, their cattle stocked, and their manure saved. But the conviction that they are in error, is a great point gained, and we cannot but hope that, eventually, it will embrace and correct the most prejudiced minds.

In another part of the State which I have more recently visited, Fairfax county, the same spirit of inquiry, and desire for improvement is manifested. Recently, a number of individuals, practical farmers, from the State of New York, have purchased large tracts of the worn-out lands in the vicinity of the court-house, and have commenced a system of operations which has at once awakened the surrounding husbandmen to new efforts, and enhanced the price of land. They have settled upon the lands, erected barns, divided the extensive fields, introduced better implements, and are setting examples of industry and carefulness, which are giving a new aspect to all the adjacent country.

We flatter ourselves, however, that Mr. Brown did not see the best Virginia farming, notwithstanding he extended his visit, a little way, into the celebrated county of Loudoun; and as he seems to be a good, gentlemanly fellow, who has a high relish for the Virginia hospitality, of which he has had a taste, we invite him, if he has no objection to thawing a little earlier than usual, to join us in our projected tour this spring. We will take him along on James River, and will show him some things that will gladden his heart, and afford him opportunities of writing home the prettiest sort of letters to his friend, Gov. Hill, of the Visitor.

PREMIUM TOBACCO PRIZE.



In our last number, we furnished a cut of Mr. Morriss' Tobacco Prize; we now give an engraving of another, manufactured by Sinclair & Co. of Baltimore, which the Editor of the American Farmer recommends in high terms, and which obtained the highest premium offered by the Prince George's Agricultural Society at its late fair, held at Upper Marlborough.

The machine is so clearly delineated as to make an explanation almost unnecessary. It is, however, thus described in the American Farmer:

"It consists of a strong horizontal frame work, which is secured by iron bolts, braced at the tops by heavy iron rods, in which, in the operation of pressing, as will be seen by the figure, the hogshead is placed. The six wooden levers represented in the cut, work a pinion which operates on a large wheel, in the centre of which an iron shaft is secured, upon the bottom of which is another pinion, which operates on the line of cogs placed on the side of the *stuffer* shaft, which forces the tobacco into the hogshead with a pressure that gives it the desired compactness."

This machine is sold at $125, and is, we think, in no whit superior to that of Mr. Morriss, which is in pretty general use amongst our planters, and the whole cost of which, we suppose, would be covered by the sum of twenty dollars, at the outside. It is true, that a little time may be saved by the former, but, in our opinion, this is much more than counterbalanced by the fact, that repairs cannot be effected without going to a machine shop. It is a matter of the utmost importance in getting up a machine for a farmer, to give him one, if possible, that he can construct without going off his plantation—for what he can construct, he can work, and what he can construct, he can repair. This, we think, is a point not sufficiently attended to by the committees, who award premiums for agricultural implements.

We do not desire by these remarks to injure the enterprising manufacturers of this new prize. Our opinion is, that the desired object can be effected by a press of easier, cheaper, and simpler construction, but we place both plans before our readers, leaving them to form their opinions, which may probably differ from our own.

A pail full of lye, with a piece of copperas half as big as a hen's egg boiled in it, will produce a fine nankeen color, which will not wash out. This is very useful for the linings of bedquilts, comforters, &c.—*Western Farmer.*

A correspondent of the Boston Transcript says that a small quantity of *green sage* placed in the closet will cause *red ants* to disappear.

MANURES.

Sir Humphrey Davy, long ago, demonstrated that in the process of fermentation some of the most valuable properties of manures were evaporated. By means of a retort, filled with heated dung, the neck of which was introduced in the soil amongst the roots of vegetables, he produced an extraordinary luxuriance of growth. Indeed, it is certain, that all the valuable properties of manure are volatile and soluble; that is, may be evaporated by heat, or washed away by water. How necessary then to imprison these subtle agents before they have time to escape, and what folly it is to expose them to the seducing influence of heat and rain. Remember, that these thieving devils are ever on the alert to rob you of your most valuable property; and do not forget to guard your dung heap against the rogues with the same care you bestow upon your corn house; and, as you lock your door upon the latter, turn the soil over upon the former; or, what is still better, throw it abroad amongst your growing crops; they will act as a most vigilant police, and arrest the runaways just as they are flattering themselves with the certainty of escape.

The celebrated Mr. Coke fully recognised the fact that fermentation occasioned loss, but still he permitted it, to a slight extent, because, the vitality of noxious seeds, contained in the manure, was thereby destroyed; and he thought, that, in that way, he gained more than he lost by the escape of the fertilizing gases.

With due deference to Mr. Coke's opinion, we incline to think that, in a *majority of cases*, the sooner manure is applied the better.

NEW PAPERS.

We have been much pleased to observe the extended influence of agriculture, as evinced in the course of many of our political and miscellaneous papers. The truth is, this great interest, the pursuit, for which nature and circumstances have peculiarly adapted our country, begins to make itself heard in every direction. Our people have just awakened from their golden dreams, to return, with all the ardor of first love, to this certain, honorable, and congenial occupation. The consciousness of the delusion under which they have been laboring, the utter folly and madness, and crime, of substituting speculation, which is but another name for gambling, for the toil of honorable occupations have become apparent, and these wild dreamers, conscience stricken, humble, and repentant, have submitted themselves again to the great law of nature, which dooms man to obtain his bread by the sweat of his brow. Amongst the many honorable pursuits of life, which have been thus recruited, agriculture has come in for its full share. This circumstance has given a new impulse to this noble art, and has excited an interest in the community, which has secured it a place in many of the political journals of the day. Amongst these, we are happy to find our friends of the Compiler taking a distinguished part. They have remodelled their paper; reducing the price, and adding an agricultural head, which, from the long experience and known ability of the conductor, will, we doubt not, render the Compiler as acceptable to the agricultural, as it is now to the commercial, community.

Mr. Fisk too, late of the "Old Dominion," Portsmouth, has started, in this city, a weekly paper, called the State Rights Republican, in which, we understand, a considerable space is to be devoted to the cause of agriculture and mechanics. We hear that Mr. Fisk has figured largely in the political world, and doubt not, he will sustain, in his new sphere, the reputation he obtained in his old one. We wish him success in his enterprise.

We have also received, indirectly, an intimation that a new agricultural paper will be started, shortly, in the city of New York, under the superintendence of that well known breeder and writer, Mr. A. B. Allen. We shall look forward to its arrival with much interest, and have no doubt it will prove a powerful aid to the Cultivator, which has already done so much for the cause of agriculture.

CORN.

The following is an extract from a letter addressed to the Editor of this paper. Mr. Green is not the only one of our subscribers who is desirous of a "talk" upon the cultivation of this important crop. Much contrariety of opinion exists, where certainly experience should by this time have arrived at some definite conclusion. Although difference of opinion may be frequently owing to difference of soil, climate, &c. still there are great general principles upon this subject yet unsettled. We hope Mr. Green's inquiries will bring to the columns of the Planter a full, fair, and *condensed* discussion of this impor-

tant topic. We assure him we will do all we can to elicit it. We undertake for at least one essay upon the subject in the February number from an "experienced, practical corn planter."

"Can you not induce some experienced, practical *corn planter* to furnish for the Planter a full and minute account of the best plan of raising corn? Such a paper would be invaluable to a large number of your subscribers, who, like myself, are beginners, and not too old to learn, nor too wise to be benefitted by the instruction of others. To meet our wants, the paper should embrace the preparation of the ground before planting—the time of planting—the distance between the rows, and the distance between the hills—the number of stalks to be left in a hill—how it should be cultivated—the kind of plough—how often ploughed—how often hoed—when it should be laid by—whether the seed should be soaked, and if so, in what? If you can procure some instruction upon these points from an experienced and successful corn grower, in time for your February number you will render a great service, not only to me, but to many others, and the author of the paper will be a benefactor both to man and beast. Col. Isbell's paper in your last number is very valuable, and I for one am under great obligations to him for it, but it does not go sufficiently into detail to supply my wants fully.

"With the sincerest desire for the success and prosperity of the Southern Planter, I am sir,

Very respectfully yours,

NATHANIEL T. GREEN."

MISCELLANY.

TO GET ON IN THE WORLD.

Volumes have been written to tell how it is done, and the condensed substance of the whole is contained in the following paragraph from Blackwood. The advice there given is infallible.

"To get on in this world you must be content to be always stopping where you are; to advance you must be stationary; to get up you must keep down; following riches is like following wild geese, and you must crawl after both on your belly; the minute you pop up your head, off they go whistling down the wind, and you see no more of them. If you hav'nt the art of *sticking* by nature you must acquire it by art; put a couple of pounds of bird's lime upon your office stool, and sit down on it; get a chain round your leg, and tie yourself to your counter like a pair of shop scissors; nail yourself up against the wall of your place of business, like a weasel on a barn door or the sign of the spread eagle; or, what will do best of all, marry an honest poor girl, without a penny, and my life for yours if you don't do business! Never mind what your relations say about genius, talent, learning, pushing enterprise, and such stuff; when they come advising you for your good, stick up to them for the loan of a sovereign, and if ever you see them on your side of the street again, shiver me and welcome; but, to do any good I tell you over and over again, you *must be a sticker*. You may get fat upon a rock if you never quit your hold of it."

We cut the following from an exchange paper. It is not new, but well worthy of preservation. It is penned in a strain of lofty independence that must find a response in the breast of every freeman.

A NOBLE EPITAPH.

The following epitaph, found upon a cannon in the Island of Jamaica, near the spot where the remains of Bradshaw, the chief of the regicide judges, was interred, and published in a newspaper in this country in 1775, is the noblest production of its kind I ever met with. The reader will find in the closing line that great maxim which has hitherto been erroneously ascribed to the immortal Thomas Jefferson:

STRANGER!
Ere thou pass, contemplate this cannon;
Nor regardless be told,
That near its base lies deposited the dust of
JOHN BRADSHAW,
Who nobly, superior to all selfish regards,
Despising alike the pageantry of courtly splendor,
The blast of calumny and the terrors of vengeance,
Presided in the illustrious band of heroes and patriots
Who fairly and openly adjudged
CHARLES STUART,
Tyrant of England,
To a public and exemplary death;
Thereby presenting to the amazed world,
And transmitting down through applauding ages
The most glorious example
Of unshaken virtue, love of freedom, and impartial justice,
Ever exhibited on the blood-stained theatre of human action.

O! READER!
Pass not on till thou hast blessed his memory;
And never, never forget,
That Rebellion to Tyrants is Obedience to God.

YANKEES.

Jeffries, the celebrated British reviewer, once paid, unwittingly most likely, a handsome compliment to the indomitable perseverance of our countrymen. He remarked that it was his firm belief that if a premium of one thousand dollars were offered for the best translation of the Greek

Bible, it would be taken by a Yankee, who till the offer was made, had never seen a word of Greek in his life—that he would commence learning the language immediately, to qualify himself for the great undertaking, and would finish the whole work quicker than any other person, and bear off the premium.

We have not much fancy for "Lady" poetry in the general, but there are some subjects that seem to fall peculiarly within the province of the gentler sex. We are sure none but a woman could have written the following beautiful and touching lines from the pen of Mrs. Sigourney. They are called,

THE WIDOW'S CHARGE,

AT HER DAUGHTER'S BRIDAL.

Deal gently thou, whose hand has won
The young bird from the nest away,
Where careless 'neath a vernal sun
She gaily caroll'd day by day—
The haunt is lone,—the heart must grieve,
From whence her timid wing doth soar,
They pensive list, at hush of eve,
Yet hear her gushing song no more.

Deal gently with her,—thou art dear,
Beyond what vestal lips have told,
And like a lamb, from fountains clear
She turns, confiding to the fold;
She round thy sweet domestic bower,
The wreaths of changeless love shall twine,
Watch for thy step at vesper hour,
And blend her holiest prayer with thine.

Deal gently, thou when far away,
'Mid stranger scenes her foot shall rove,
Nor let thy tender cares decay,
The soul of woman lives in love;
And should'st thou wondering, mark a tear
Unconscious from her eyelid break,
Be pitiful, and soothe the fear
That man's strong heart can ne'er partake.

A mother yields her gem to thee,
On thy true breast to sparkle rare—
She places 'neath thy household tree
The idol of her fondest care;
And by thy trust to be forgiven,
When judgment wakes in terror wild,
By all thy treasur'd hopes of heaven,
Deal gently with the widow's child.

A SEASONABLE HINT.

Dean Cowper of Durham, who was very economical of his wine, descanting one day on the extraordinary performance of a man who was blind, he remarked, that the poor fellow could see no more than "that bottle." "I do not wonder at it at all, sir," replied Mr. Drake, a minor canon, "for *we* have seen no more than 'that bottle,' all the afternoon."

TO THE READER.

We must apologise for the lateness of this number, and taking time by the forelock, for what will be the lateness of the next. We did not commence the Planter until late in February, 1841, and our desire to finish the twelve numbers within the year induced us to publish a double number in December. This circumstance, together with the great press of job work at the office where our paper is printed, (as yet we have none of our own) has put us a little behind hand. Our printer, too, is so good a fellow, and labors so hard to accommodate all the custom that his well earned reputation brings him, and withal, gives us our work, when we do get it, in such neat and handsome style, that we cannot find it in our hearts to scold him for the vexation, which the delay has occasioned us. Nevertheless, we are well aware of the value of punctuality, and we are determined that the Planter shall be punctual to the first of the month. Probably it will be the first of March before we effect this desirable object, but let us once get matters straight, and it shall go hard but we keep them so.

BACK NUMBERS.

The second number is now completed, and the fifth, the last to be reprinted, is in hand. By the middle of February, the back numbers will be mailed to our old subscribers, and the whole of the first volume will be ready for delivery, bound or unbound, to new ones.

☞ We have been induced to believe, that many of our subscribers, who intend to renew their subscription, will, from the procrastination that is natural to mankind, fail to do so for a time, greater or less, as the case may be. Now, as it is extremely important for us to know, as soon as possible, the extent of our subscription list, we have taken the liberty of sending this number to all of our old subscribers, whom we respectfully request to renew their subscriptions. If they decline doing so, will they be good enough to envelope the number and direct it again to the Southern Planter? We would not trouble them with this request,

but that the number is valuable to us as one of a series. Of course no other number will be sent until the money is remitted.

For the many renewals that we have already received, and the very great addition of new subscribers, with the thousand kind and complimentary encomiums that have been bestowed upon us, and which we dare not flatter ourselves we have deserved, we are profoundly grateful.

Richmond Markets, January 20, 1842.

BUTTER—Mountain Butter, wholesale 12½ a 16 cents for firkin; 20 cents for roll.

COTTON—8 a 9 cents per lb.

CATTLE—For Cattle on the hoof, from $4 to $5 50 are the general prices. *Mutton*—There is great variation in the quality; indifferent sheep bring only from $1 to $2, while the finer qualities bring from that to $5 per head.

FISH—Mackerel, No. 3, $7. Herrings—No. 1, N. C. $3 50; No. 2, $3; Potomac cut, $3 25. Shad $5 50 per bol.

FLOUR—$6—dull.

GRAIN—Wheat $1 15 a $1 20, are the prices now paid for good red and white. Corn 55 cents per bushel. Oats—40 to 42½ cents from vessel; from wagons and depot 45 cents. Very little grain coming into market.

HIDES—Green 5 cents per lb.; Spanish 15 a 16.

IRON—Pig, $25 to $35; Swedes, $100 per ton. English, $85 to $90; Tredegar, (Richmond manufactory,) $90; Up Country bar, $75 a $80.

LUMBER—Clear white pine $36; refuse clear 32b merchantable $22; refuse last sale at $14; flooring $15 a $20 per M.

LIME—$1, and dull—none now afloat.

MEAL—65 to 70 cents per bushel.

PROVISIONS—Bacon—Old Smithfield dull at 6 cents; new city cured, 7½ a 8 cents—demand small; old Western sides 3 a 5, as to quality; shoulders 2 a 4 cents—demand for old sides fair. Lard 7 a 8, retail demand only.

PLASTER—Last sales at $3 50 at Rocketts.

SALT—$2 a $2 25 per sack, sales. Stock very light.

SOAP—For brown 4 a 6 cents per lb.; white and variegated 12 a 14.

STEEL—American blistered $135 to $140 per ton.

TOBACCO—But little doing—no change in price.

TEAS—Imperial and Gunpowder 80 cents a $1 05 per lb.; Black 45 a 60 cents.

WHISKEY—Very dull. We quote Hhds. 25 cents; barrels 26 a 27 cents.

FREIGHTS.

ON THE CANAL—To Lynchburg and intermediate places, 10 cents per 100 lbs.

EXCHANGE.

FOREIGN.—On London 15 per cent. premium.

DOMESTIC.

New York Checks 6 a 6¼ premium.
Philadelphia ¾ a 1 premium.
Baltimore 2 1-4 a 3.
North Carolina Bank Notes, par.
Do. do. do. under $5 2½ discount.
South Carolina 3 premium.
Savannah, par.
Augusta, par.
Alabama 15 discount.
Tennessee 15.
Specie 4½ premium.

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THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.* | Tillage and Pasturage are the two breasts of the State. *Sully.*

C. T. BOTTS, Editor. Opposite Merchants' Coffee House, Main Street.

VOL. II. RICHMOND, FEBRUARY, 1842. No. 2.

For the Southern Planter.

AN ESSAY ON THE BEST METHOD OF CULTIVATING ROOTS.

In treating on this subject, I propose to consider it in the following manner:

1st. The special and peculiar value of this article as a food for stock;

2d. The best mode of its cultivation; and,

3d. The peculiar roots that seem best adapted to our climate and soil.

On the first point I would remark, that after carefully considering the subject, I do not consider roots as specially valuable, on account of the *nutriment*, which they contain. Indeed I think it more than probable, that an acre of strong land, such as we commonly give to roots, would, if planted in corn, generally produce as much nutritive matter, and perhaps more, and that, too, with less than one-half of the cultivation. If the corn be sowed broad-cast, and mowed down when in the tassel, and then treated as hay, there is no doubt, that the fodder would yield twice as much nutritive matter, especially for cattle, as the same land would furnish when cultivated in roots; and this too with an amount of labor bearing very little proportion to the root culture. Nor ought it to be forgotten, that two such crops may be easily obtained from the same land, during the same season. The ordinary product of corn, on good land, when cultivated in the ordinary way, is about fifty bushels to the acre. This, together with the blades, the tops, the shucks, the stalks and the cobs, may be considered as fully equal in nutriment to five hundred bushels of roots. This being the case, and the corn crop more certain, and requiring, at the same time, much less labor in its cultivation, seems at once to determine the thing in favor of corn. Wherein then consists, it will be naturally inquired, the great value of the root crop? To this, I reply, that in feeding, our sole object is not to supply an amount of nutriment barely sufficient to sustain the animal; but to fill his stomach, and thus to satisfy him, and keep him quiet. Besides, it is a point conceded on all hands, as I have reason to believe, that a *variety* of food, is not only highly beneficial, but absolutely necessary to the thrift of any creature. Some time ago, this matter was fairly tested in Paris, by a series of experiments, entered into on this very subject. The animal experimented on was the dog. A number of these creatures were put in separate confinement, and all fed on the most nutritious food, but each restricted to one individual kind. Some were fed with bread, some with meat, and others, again, with sugar, but the result in all cases, was ultimately the same—they all sickened, pined away and died.

Now, every breeder must have observed the great value of green food, in the sustenance of his stock. There is no food which they appear to eat with the same avidity—nor is there any food, which keeps them in better health and thrift. Every farmer must also have observed, that his cattle and other animals, kept a long time on dry food, appear to become tired of it, and even to loathe it; and that at the approach of spring, they become weak and delicate, and this too in the midst of plenty. Now here is a case, in which the great value of succulent food clearly displays itself. In winter and early spring we cannot get green food. For the lack of this, or some substitute for it, our cattle of every description decline—our oxen become too poor to perform their labor—our cows yield a poor, blue milk, and that too in very small quantities, and the butter, if any butter is made, is scarcely eatable. But in winter we can get roots, and these, especially when boiled and mixed with a small quantity of meal and salt, will furnish a rich and most valuable food. Indeed, roots, by their juicy qualities, appear to go a great way towards supplying the deficiency of green food, at that season of the year when it is so desirable.

Another great and even paramount benefit of the root crops, is manifested in that all-important branch of good husbandry—the making of large quantities of rich manures. This crop, it is said, has given a new impulse to the whole system of English husbandry. There the root is cultivated, not in patches, but in large fields, and by this great multiplication of food, the English farmer is enabled greatly to increase the number of his stock. And the thing seems to go on in a kind of geometrical ratio, for the more food he has, the more cattle he can keep; and the more cattle he has, the more manure he can make. Instead, therefore, of manuring his lands by small patches, which was formerly the case, he now manures them by whole fields, and his products, are proportionably increased. Every farmer in this country must also have observed, how luxuriant his crops are on his turnip patch, compared

with the adjoining lands; and this, too, for a number of years in succession. Now, what can be the reason of this? It is not simply that turnips *grow there*. It is because of the special care which was taken first in the manuring, and then in the culture of that spot. Now suppose, that instead of a small piece, we extend our efforts, and by means of enlarged exertions, bring a larger piece into profitable cultivation: every one must see, that in this way whole fields, one after another, will ultimately be enriched. And I do contend, that upon trial, the root will be found a most important auxiliary in bringing about this great desideratum. Besides, cattle when restricted for a long time to dry food, not only loathe it, but it seems to have a very bad effect upon their bowels. Their excrement is voided in dry lumps, and in very small quantities; and their whole appearance plainly indicates that their health is materially suffering. Now, the best antidote to this, or the best remedy, when it has occurred, is frequent and generous supplies of rich food, of which some one of the roots forms a principal part. If, therefore, by root culture, our lands are actually improved—if, by feeding on roots, our stock is kept in good thrift, and especially, if by the same, we can make a much larger amount of manure, and of a quality greatly improved, then the question is at once settled, that this is a most valuable crop.

The next thing to be considered, is the best mode of cultivating it. And here I would observe, that the rich, deep, *loamy* soil, is evidently the best for this crop. An excess of clay or sand is found, upon trial, an unfavorable position; but that peculiar mixture of the two which forms what is commonly called a *loam*, is decidedly the best. Having then selected a suitable situation, if not already rich, it must be made so: for it is mere folly to attempt to raise the root on poor land. The quantity of manure to be applied, will depend on the condition of the land. If very poor, it will require fifty or sixty cart loads to the acre—if in good heart, half that quantity will be sufficient. Special attention ought also to be paid to the *quality* of manure. Coarse materials, such as we usually get from the farm-pen, will not answer the purpose. Our finest and richest manures, such as we get from our stables, ought to be selected for this crop, and if they have lain and fermented awhile, so as to separate into small pieces when spread, it will be all the better. Roots, when grown among lumps of manure, are found to be crooked and branchy, whereas, if they are sustained by fine manures, they are straight and free from prongy branches.

The ground being enriched, the next thing is to prepare it for sowing. This is to be done by repeated ploughings and harrowings, until the whole is reduced to the finest tilth. Every clod and turf ought to be completely reduced, and the whole surface made as fine and light as possible. In this process, especially where beets, carrots, and parsnips are to be grown, it will be of great service to use the coulter, running the scores as deep as possible. This will break and loosen the sub-soil, and thus give a deeper tilth to your plantation. The ground being thus prepared, I greatly prefer, especially for spring roots, to throw the whole into beds, such as we use for planting corn. The object of this is to drain off the superfluous water, which at this season of the year is often injurious. These beds, I would make at distances of six feet, and on each bed put two rows of roots. The rows will then be three feet apart, and this distance I prefer, not because the roots will not grow nearer together, but because of the greater convenience of after-cultivation. This, I am aware, is generally classed among the hoe-crops, but with the exception of the thinning and first-weeding, it need not necessarily be so, for in rows of the above distance, the plough and cultivator, may be made to complete the whole process, and this at a great saving of time and labor. Turnips may be cultivated, pretty much as the other roots, except that for them, the season being farther advanced, I would not throw the land into beds, but leave the surface as smooth and level as possible. Beets, carrots, parsnips and potatoes, ought all to be planted as early in spring as the ground will thoroughly pulverise—turnips from the 20th July till the 10th of August. In sowing, many persons use a drill, but I find that an experienced hand will take the seeds between his thumb and fingers and deposit them with great accuracy and rapidity. Indeed, I had rather depend on a careful operator, than on the best drill I have ever seen. As soon as the seeds are sown, they ought to be covered slightly with fine earth. The hand-rake is a very suitable instrument for this operation. And then it is a matter of great importance to pass a heavy roller over the whole. It is very desirable that the ground should be in a moist state at the time of sowing, but if it has been prepared with the care stated above, I would not hesitate to sow even in a dry time. I recollect once seeing a turnip-patch, over a small part of which, the roller had accidentally passed—there the turnips had come up very thick, whereas on every other part they were too thin for half a crop. If a roller cannot be commanded, the deficiency may be pretty well supplied by walking over all the scores, taking care to make the steps very short. The great object is to bring the seeds in firm contact with the ground, which can only be done by pressure of some kind; otherwise, spaces will be left about the seeds, which will prevent their vegetating. In sowing, especially the turnip, the chief danger to be apprehended, is the unnecessary and profuse use of seed. A very successful cultivator of this root once observed to me, that his practice in

sowing was to take out as many seeds as he thought would be sufficient for his patch; but in going along, he was careful to stump his toe, and spill at least one-half—the balance, he found amply abundant. The fact is, the man prepared his land with great care, and this will at once, account for his great success in the vegetation of his seed. I have often seen it stated, that one pound of seed is sufficient for an acre; but as it is easier to remove supernumeraries, than to supply deficiencies, I would prefer half as much again.

The turnip crop, especially in its young state, has a most formidable enemy in what is commonly called the turnip-fly or beetle, a small insect somewhat larger than the flea, but resembling that pest in this, that it skips away at the approach of danger. So troublesome is this insect in England, where the turnip is cultivated to a very great extent, that the government of that country has offered a very large reward, £20,000, I believe, for an effectual antidote to its depredations. Essay after essay, amounting in the whole, to many volumes, has been written on this subject, but still their crops are often totally destroyed. I have often thought, that were I in that country, I should pocket the cash. I have at least discovered a remedy which, after more than ten years' trial, I have found effectual, and that is by strewing a small quantity of fine tobacco over the plants whilst in their tender state. But it is to be remarked, that if the strength of the tobacco be destroyed by a shower of rain, the process must be repeated, until the plants are out of danger. The after-culture consists in thinning the plants, when sufficiently large, to intervals of about ten inches or a foot, and then in keeping them perfectly free from weeds and grass throughout the season. Turnips commonly vegetate very quickly after sowing, so that the seeds require no soaking or other preparation; but beets, carrots and parsnips being enveloped in a hard crust, require a long time to vegetate. I would, therefore, recommend that previous to sowing, the latter be soaked some three or four days in warm water. Indeed, I object not, if they be not only greatly swollen, but many of them actually sprouted. When committed to the ground in this state, they come up quickly, so as to get the start of weeds, their great enemy.

And here I cannot impress it too strongly upon every cultivator of the root, to be very careful as to the quality of his seeds. If this article be defective in any respect, the crop will be proportionably curtailed. I have satisfied myself, from long experience, that *bought* seed cannot be invariably relied on. In some instances, though sowed with every necessary precaution, they have entirely failed—in others, the vegetation has been very partial, and the few plants which made their appearance, were weak and sickly. This being the case, I would strongly recommend, that every man should raise his own seed. I have never been disappointed in the home-bred article. In raising seed, I have seen it recommended, and experience has proved to me, that the plan is an excellent one, to remove all the lateral branches, leaving none but the strong middle stem to bear the seed. These seeds are larger and heavier, and it is but reasonable to suppose, that they will impress their own product with their character.

We will now consider the crop as come to maturity, and if throughout the whole process, you have used sufficient care and industry, and especially, if a kind Providence has given you a good season, the crop will be an abundant one. Of beets, the product will be about eight hundred bushels to the acre, and of turnips, carrots and parsnips, about five hundred bushels. Indeed, we constantly have accounts of more than double this quantity; but my calculation is founded upon the hot, dry climate in which we live.

The foregoing is from the pen of a distinguished agriculturalist, who is known to us by *reputation*, at least. We are sorry that particular circumstances induce him to withhold from his communication the authority which his name would carry with it, but, as beggars cannot be choosers, we must be thankful for whatever we get.

The first point is to establish the relative value of the root crop, a question, that we have considered hitherto not exactly settled. Our author, whilst he admits the greater product of the corn crop, rests his argument in favor of roots upon the superior cultivation induced, and their peculiar fitness in supplying the want of green food, at a season when it cannot be had. Now we humbly apprehend that corn might, nay ought, to be cultivated as highly as the root crop itself; the same degree of pulverizing and manuring, that is necessary to the one crop, is equally advantageous to the other; and we cannot see how the man, who neglects his field when planted in *corn*, can be expected to attend to it, because it is planted in *roots*.

As to the value of green food, we have been inclined to think that nature generally provided it at the season when she required it. At any rate, we have considered that sound, old, corn was a pretty good substitute for it.

If the root crop can be introduced advantageously amongst us, and we only desire, by the doubts we have expressed, to induce inquiry,

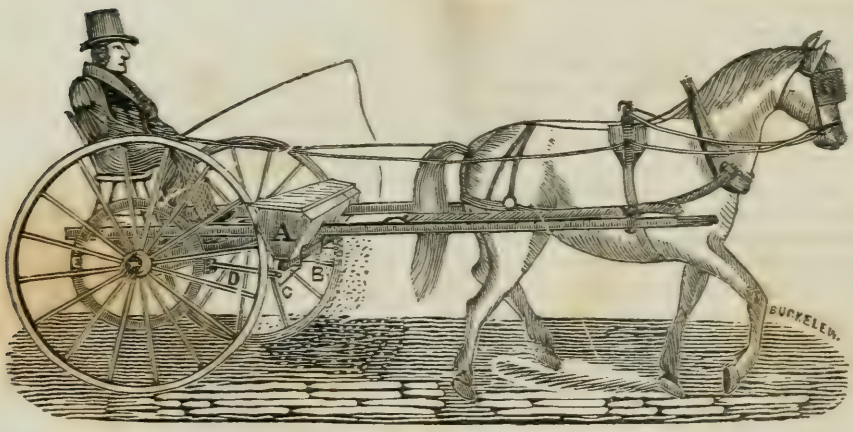
then is this communication, which will be continued in our next, invaluable to the southern farmer.

FOOD FOR HORSES.

The following is a clear and condensed statement of facts, exactly fitted for the columns of the Planter. It comes from the county of Albemarle, and the plan, we understand, finds great favor with some of the best farmers.

Mr. Botts,—We feed horses on corn cut the last of August and 1st September, stacked, at first, half a barrel in each stack or shock, afterwards more; the last of October and 1st November it is housed; that for the horses, shuck and all; from twelve to fifteen ears per horse are placed in a hogshead filled with water, one quart of salt and one pint of lime being added for ten horses; the hogshead is divided with plank, so as to enable us with less trouble to come at the corn which has been in a sufficient length of time, (twenty-four hours). Thus morning and night a side of the hogshead is filled. We find from twelve to fifteen ears sufficient in winter to keep a horse fat; ours work constantly and hard. This plan also saves near half the hay usually wasted. We use no rack, having instead, double troughs, which makes it necessary to cut the hay. COLLONUS.

HATCHES SOWING MACHINE.



EXPLANATION.—This machine consists of a pair of wheels of the size of ordinary carriage wheels: an axle tree ten feet long, with a pair of shafts for the horse to draw by. Just in front of the wheels, and across the shafts, is the hopper A, ten feet long and capable of holding three or four bushels of grain. At the bottom of the hopper is a slide or agitator one inch square, faced with iron and having teeth on the inside, by the motion of which the grain is shaken out. The width of the crevice, and the consequent discharge of the seed, can be increased or diminished by means of set screws, as shown at B. When the machine is in operation a rapid vibratory motion is given to the agitator by means of a small rod and crank C, attached to one end of a small shaft fifteen inches long, on the other end of which is a pinion wheel D, with cogs or teeth meshing into the master wheel E. The master wheel is bolted on to the inside of the spokes of the high wheel of the machine. It is two feet in diameter, and one revolution of it gives eight revolutions to the pinion wheel and shaft. On the top of the back part of the machine is a seat for the driver. A small cord is attached to the end of the pinion shaft, and reaches to the seat of the driver, by means of which he can readily put the machine out of geer, so as to stop the discharge of seed at any time when desired. The machine will sow all kinds of grain, grass seed and plaster, at any desired rate from four quarts to as many bushels per acre. It is easily managed, and not liable to get out of order. A man or a smart boy with a horse, can sow from twenty to twenty-five acres with it in a day. The inventor and proprietor of this machine has spent several years in testing and improving it, and he now introduces it to the public with the utmost assurance that it will fully meet the wants and expecta-

tions of the community. It is well known that sowing is one of the most difficult and laborious operations of the farmer, and one which but few men can perform properly. Hence arises the need of a machine like this—one that will perform the work correctly, expeditiously, and with ease. All who have used this machine, agree in declaring that it answers the purpose exactly; and if we are not mistaken, it will in a few years be as uncommon to see a farmer sowing grain by hand in this country, as it now is to see one thrashing with a flail.

The cut and description are both taken from the American Mechanic, and contain all that we know upon the subject.

For the Southern Planter.

Mr. Editor,—It may be safely asserted that two of the most prominent causes of the present impoverished state of our lands may be found, first, in our want of care in availing ourselves of every means of improvement in our power, and, secondly, our want of judgment in their application. The object of this article is, first, to point out a source of improvement, (which with us at least has hitherto been neglected,) and, secondly, to point out an error which is often committed, even by those, who are considered good farmers, in the application of their compost. The source of improvement, sir, to which I allude, is rich earth, such as we find around old houses, the corners of fences, which have stood for many years, &c. I had often heard of the improvement effected by this kind of earth, and was induced, in 1839, to apply it to some poor land, which I wished to cultivate in corn, and the result was altogether satisfactory; for by its aid, land, which would scarcely have brought five bushels of corn, produced five barrels, to the acre, although the first planting was almost entirely destroyed by the cut-worm, and it was not replanted until the 16th of May. Not having used this earth before, (and not having that confidence in it which I now have) I was induced to apply it in too large quantities, as I put one hundred loads to the acre. This was spread, and the land then ploughed, whereas, had I first ploughed the land and then applied the earth, I believe that the same benefit would have been derived from the application of half of that quantity.

The wheat upon this land was so injured by the various diseases, which affected that crop in 1840, that, although there was a great increase of straw, there was no great yield of wheat. But there is now a fine crop of clover on this land, which promises great improvement. To some, this method of improving may appear to be too laborious, and indeed would be, had we to haul it as far as we have to haul our compost; but this is not the case, for this earth is often within a few yards of land, which requires it, and to improve it by this earth, is, in fact, easier, than to improve it by compost. By availing myself of this source of improvement, I was enabled, in one year, to get out upon my land two hundred loads to the hand, of improving matter, whereas, had I relied upon my stables and farm-pen, I would not have had more than fifty loads to the hand. The second thing to which I wish to call attention, is the error committed by many farmers in the application of their compost. With many, it is the custom to haul out their compost early in the spring, upon the land, which they intend to fallow, where it is deposited in piles of a single load each, there to remain until the land is fallowed, which is generally done about August. This method of applying manure, though it may appear absurd to you, Mr. Editor, is quite common with many farmers with us. My eyes were opened to the folly of this course, when quite a boy. The compost had been, as usual, hauled out in the spring, and suffered to remain in heaps until August, when we commenced to fallow. My father, (thinking that his want of success in the improvement of his land by compost had been the result of inattention in spreading it,) requested me to attend to it, which I did, and had it carefully scattered; but still there was no improvement, save where the piles of manure had been deposited. The fact was, that the strength of the manure had either been evaporated, or washed into the earth by rains. I will here add my method of using compost. In the fall, and early in the spring, I have those parts of my corn field ploughed which I do not intend manuring; whilst such parts as are too poor to cultivate in corn without, are left till the last. Upon this land then, I have compost hauled, spread, and immediately ploughed in before planting corn. If, however, this land cannot be manured in time for the planting of the main crop of corn, it is done immediately after, and planted in corn. The advantage of this method is, that a good crop of corn is secured, and the land is still in a fine condition for wheat. Should my corn land not require all of my compost, or should we, by the lateness of the season, be compelled to desist from hauling it out on the corn land, I prefer carrying it out as soon as practicable, and *spreading* it on the land which is intended for a fallow for wheat. This system, which is gaining ground with us, is, I think, the best that can be followed; for by the aid of the manure, there is a good crop of clover produced, and the land is rendered capable of producing a good crop of wheat. Upon land, which was manured in this way last spring, I have now a fine crop of wheat, although when it was thus manured it was too poor to produce a decent crop.

A Friend to Improvement.

BUTTER.

The following is an extract from a letter to the Editor of the Boston Cultivator. It is very certain, that the temperature is an important item in butter making. Artificial means must be used to lower it in summer, or raise it in winter, until it reaches the temperate point, if you would avoid an indifferent article, obtained with great labor.

"To make good winter butter, let the following rules be observed. Never let your milk be exposed to a cold frosty air when the cream is rising; and when the cream is taken from the milk, let it be kept in a room or closet, constructed of bricks if possible, where it can be kept warm by a stove, so that it shall not be chilled in the coldest of weather, and the cream be well stirred on every addition being made to that in the pot. The best butter is commonly made in May or June, and, of course, the cream ought to be kept in a temperature of warmth corresponding to those months. A situation nigh a cooking-stove we have found most convenient for curing the cream. We have also found a great advantage in heating the milk, when first strained, nearly or quite to a scalding heat. Such cream will not froth in the churn.

S. Brown."

Wilmington, Nov. 3, 1841.

From a prize essay on making compost heaps and the value of liquid manures, written by Mr. James Dixon, and published in the Journal of the English Agricultural Society, we make the following extracts:

"Having brought great quantities of both peat and sawdust into my farm yard, I laid out for the bottom of a compost heap a space of considerable dimensions, and about three feet in depth: three-fourths of this bottom was peat, the rest sawdust: on this we conveyed daily the dung from the cattle-shed, the urine also is conducted through channels to wells for its reception—one of each side of the compost heap;—common water is entirely prevented from mixing with it. Every second day the urine so collected is thrown over the whole mass with a scoop, and at the same time we regulate the accumulated dung. This being continued for a week, another layer, nine inches or a foot thick, of peat and sawdust (and frequently peat without sawdust) is wheeled on the accumulated heap. These matters are continuously added to each other during winter, and in addition, once in every week never less than 25 cwt.—more frequently 50 cwt. of night soil and urine; the latter are always laid next above the peat or bog earth, as we think it accelerates their decomposition. It is perhaps proper here to state that the peat is dug and exposed to the alternations of the weather for several months before it is brought to the heap for admixture; by this it loses much of its moisture. In some cases, peat contains acid or astringent matters, which are injurious to useful vegetation. On this I have not tried any decided experiment, but am led to the supposition by frequently seeing stones, some in a partial state of decomposition, others wholly decomposed in bogs, and at the depth of several feet from the surface. Some years' experience has convinced me of the impropriety of using recently dug peat; proceeding in the manner I recommend, it is superior and more convenient on every account—very much lighter to cart to the farm-yard or any other situation where it is wanted; and so convinced am I of its utility in composts for every description of soil, except that of its own character, that wherever it can be laid down on a farm at less than four shillings per ton, I should recommend every agriculturist and horticulturist that can command it, even at the cost here stated, to give it a fair trial. So retentive and attractive of moisture is peat, that if liberally applied to arid, sandy soil, that soil does not burn in a dry season, and it so much improves the texture and increases the produce of an obdurate clay soil, if in other respects rightly cultivated, that actual experience alone can fairly determine its value.

"For the conveyance of night-soil and urine, we have the largest and strongest casks, such as oils are imported in; the top of which is provided with a funnel to put the matters through, and the casks are fixed on wheels like those of a common dung-cart. For the convenience of emptying this carriage, the compost heaps are always lower at one end; the highest is where we discharge the contents, in order that they may in some degree spread themselves over the whole accumulation. The situation on which the wheels of these carriages stand while being discharged is raised considerably; this we find convenient, as the compost heap may be sloped six or seven feet high: low compost heaps, in my opinion, should be avoided. The plan here recommended I have carried on for some time. I find no difficulty in manuring my farm over once in two years; by this repetition I keep up the fertility of my land, and it never requires more than a moderate application of manure.

"The beneficial effects of top-dressing young clovers or mixed grass seeds is scarcely ever regarded with due attention. By this help crops are not only much increased, even thirty or fifty per cent. but they are also ready for cutting much sooner, which in a backward spring gives the stock farmer inestimable advantages for sorting his cattle, and thereby raising manure at his pleasure. The full effects of this practice I first experienced in the dry season of 1826: I

had some clovers which had been manured the previous winter; my land was soon covered with crop, and that so vigorous a one, that the hot weather did not overpower it. My cows that summer were tied up during the day-time, and in the night they were turned out into the pastures; most of the stock in my district were much distressed from over-heat as well as from being short of food for some weeks; milk yielded little butter; scarcely any for a time was offered in our large market town:—no doubt that year will be remembered by many gentlemen on the Agricultural Society's committee. I, however, was under no difficulties on account of the season; my clovers produced plenty of food for my cattle, and in return, they yielded as much milk and butter as I ever recollect from the same number. I am persuaded that the same satisfactory results would have followed if the same system had been adopted for feeding stock; it was that year my attention was first directed to raising compost heaps from urine. This I now do frequently without the help of any dung from the cattle-stalls. The same occasion called my mind to another matter well worthy every farmer's attention—I allude to the great superiority of the manure raised in summer-stalling to that produced in the stalls during winter. I verily believe the difference is fifty per cent. unless stock are fed in a great measure during winter with artificial food. In an arrangement for making compost heaps from urine, I would recommend a receptacle to be made at the back of the cattle-stalls just outside the building; this should hold about twenty cart-loads of mould, or any other matters to be employed; if its situation were a little lower than the cattle-sheds, all the urine would pass into it, and remain there until the mass is completely saturated, which will be sufficient; when the earthy matters are covered over with it, the compost may then be thrown out and the proceeding again renewed. In order to show part of the benefits of this practice, I beg here to observe that the most foul or weedy mould may be used; the action of the urine, if not reduced by water, is so powerful, that wire-worms, the black slug, many other destroying insects, and all vegetables, weeds, &c. when in contact with the urine for a time are deprived of their living functions. The situation for raising this compost should be protected from the weather by a covering similar to a cart-shed; indeed, the deteriorating influences of rain, sun, and arid winds, on all putrescent matters or compost are so serious, that in my humble judgment it would be worth while to have places under cover where these are usually laid down."

GRAIN-RAKE.

An implement under this name, patented by Mr. Israel Kyes, of Putney, Vermont, is highly spoken of as a labor-saving machine, and is thus described:

"It has two wheels, two feet in diameter attached to an axle long enough to pass each wheel clear of the cradled grain, say five feet. To the axle is affixed six teeth like cradle-fingers attached in line, and two handles in the opposite direction fasten in the manner of sythe-nibs that may be altered to give the right pitch to the fingers. You have a machine to take up grain from the cradle swathe much faster and easier than taking up by the hand-rake. It passes before the laborer like the wheel barrow. When a bundle is gathered on the fingers, you step your foot on a wire attached to the handle which raises the fingers and brings the bundle up ready to be bound."

PAPER NETS FOR SILKWORMS.

We know very little about the culture of silk, but are inclined to think, that, as soon as the disgust created by the morus fever shall have worn off, and the next generation come to consider the subject calmly and coolly, it will be found to be a very good business, under certain circumstances. To those who have engaged in the raising of worms, we are assured, the following extract, from a letter to the Editors of the National Intelligencer, will be worth perusal. The author, after speaking of a somewhat similar net used in France, adds,

"I will now furnish directions for making and using nets similar to mine, which I have found to accomplish well what is ascribed to the French nets.

"These nets are made by providing a frame-work of light laths, three feet long and two feet wide, (this being the size most convenient,)—the two pieces of laths three feet long being united by three pieces two feet long, one at each end and one in the middle. The holes (five-eighths of an inch in diameter) are punched in sheets of strong brown paper, three feet long and two feet wide, to suit the frames on which they are pasted. The space between the holes may be about an inch. With an instrument called a wad-cutter, twenty sheets of paper may be punched at once. Double sets of these nets will cost but little more than shelves of rough plank, and if the frames are well put together with wrought nails, they will last more than twenty years. This paper will require renewing in every period of six or seven years. After the silkworms have accomplished the *third* moulting, the nets may be laid over the worms daily, if the culturist desires it, up to the time of mounting, and the worms will be kept as clean as the most careful could desire, and with comparatively little labor.

"The nets must not be laid over the worms when they are torpid; but after the third and *fourth* moultings, when nearly all the worms are aroused, they may be laid over them daily; and when the leaves are scattered over the paper, they will speedily extricate themselves from the litter, ascend through the holes and commence eating. The nets may be used with or without shelves under them; if without shelves, they can be supported by parallel slips of timber, about twenty inches apart; if placed on shelves, they must be raised about two inches by placing blocks of timber under each end. When these nets are used, disease cannot be produced by the accumulation of litter without gross negligence, yet no claim to *infallibility* is set up for them. Let silk culturists try them. They will be found simple, (a child can apply and use them,) *economical*, and very efficient.

LAYTON Y. ATKINS."

Stafford County, Va. Sept. 1841.

In a very scientific and able disquisition, upon the subject of "Feeding," delivered before the Agricultural Society of Tennessee, Mr. Shelby enters into a physiological explanation of the fact, that half-fed animals always exhibit disproportionately large stomachs and heads. They are the two first parts provided for at the expense of the absorbents, by which the general system is nourished. He plausibly maintains, that, when this is the case in early life, the absorbent vessels become inert and powerless, for want of exercise, and that an animal, thus arriving at maturity, can never regain its lost powers—consequently, he asserts, that that prodigious increase of weight obtained by Dr. Martin and others, 3 lbs a day, is totally impracticable in such a case. A hog taken up and fed freely, after having run at large, scantily provided for from his birth, will, he avers, become sick and feverish; the absorbents having become rigid and non-elastic, he will be unable to digest this unusual quantity of food, his excrement will be more copious and richer; and a post mortem examination of the lungs and liver will exhibit evident marks of disease. In no case, he declares, will it be possible to fasten on such a subject an increase of 240 lbs. in six months; a result obtained by Dr. Martin and others with younger animals.

Now there is reason in every thing, and if the absorbents become inert for want of exercise, they may be overstrained by unnatural excess. Whilst we are not sufficiently versed in physiology to determine from which extreme most danger is to be apprehended, we do not hesitate to express the opinion, that the unnatural, surfeiting system, by which an animal is made to gain 3 lbs. a day, is neither profitable to the feeder, nor agreeable to the animal. Nor do we believe that animals in this part of the world, at least, often fail to get enough to keep their "absorbents" in exercise: at any rate, if a running-out hog, when he is taken up and fattened, becomes diseased; all we have to say is, that sick hog-meat makes pretty good eating.

SOILING.

Much has been said both for and against the soiling system. Like all other theories, it has had its opponents and advocates, who run into extremes, and like all other extreme partisans, they have been both in the wrong. Under certain circumstances, we have no doubt the system may be pursued to infinite advantage, and we believe it is generally better adapted to the plan of northern, than southern farming. To the north the whole farm is highly cultivated, and they have little or no pasture land, that they could not reap. Fencing, too, is much more of an object with them than with us.

Still, as there are many here to whose circumstances the system would apply, partially at least, we present the following statement of its advantages:

JOSIAH QUINCY'S FARM.

Josiah Quincy, President of Harvard College, has one of the finest farms in the vicinity of Boston. It is extensive, and surrounded by a flourishing hawthorn hedge; but there is not an interior fence on the premises, the whole presents a single field, devoted to all the various purposes of agriculture. No part of it is allotted to pasture, properly speaking, as his cattle are fed in their stalls and never suffered to roam over the fields; and the advantages of his system are thus given: Formerly there were seven miles of interior fence to be kept in repair, but by keeping the cattle up the whole of this expense is saved. Formerly sixty acres of this farm were devoted to pasturage; but now, a greater number of cattle, by one-third, are kept upon the products of twenty acres, and the cattle are in the best condition.

The saving by these means is enormous, and the immense advantages arising from it too apparent to be dwelt upon. During the summer the cattle are fed upon grass, green oats, or barley, cut the day before and suffered to wilt in the sun; but the manure which is thus saved

will more than pay the extra expense and trouble. The farm is most highly cultivated, and every kind of grain and vegetable has a place.

When a man's land is all tillage and mowing, there is no doubt of the great economy of the soiling system; but when a farm contains many acres of broken pasture lands, which have never been subjected to the plough, and a small proportion, relatively, of mowing and tillage land, the system cannot profitably be adopted. Yet all farmers will find it good policy to have a small quantity of land devoted to green crops, to be fed out to their milch cows in case of drought or partial failure of their pastures, or rather to keep up a full flow of milk as the feed in the pastures becomes old and tough.

Boston Cultivator.

POTATOES.

The following directions for cooking Irish potatoes, which, by the bye, is not such an indifferent matter as some people seem to think, are taken from the Southern Agriculturist, and come, we warrant it, from the pen of a master, or mistress, in the culinary art:

"An untinned iron saucepan is always preferable for boiling potatoes. In preparing them they should never be peeled, or they cannot be well cooked, and much of their nutritious quality will be lost; they only require to be washed clean, and at farthest to be lightly scraped. After soaking for about an hour, put them into the saucepan with cold water enough to cover them, and when it begins to boil (which is the chief point to be observed in the cooking of them), let a tea-cup full of cold water (rather more or less according to the quantity) be put in, which will check the boiling and allow time for the potatoes to be done all through, without their being in any danger of breaking; when they are sufficiently soft, which may be known by trying them with a fork, pour off the water, and let the saucepan with the potatoes continue for a short time over a gentle fire, and the heat will cause any remaining moisture to evaporate, when, after having been peeled, they will be fit for table. By this method of cooking (if strictly adhered to) they will be found, especially if of a good kind, to be very mealy, floury, and delicately tasted."

USEFUL INFORMATION TO GARDENERS.

To prevent birds destroying your seed-beds, place thin *white strings*, such as is commonly used in shops, across the beds, about an inch above the ground, fixed tight by wooden pegs. Where feathers, dead birds suspended, and other devices, have failed, this effectually *scares* the marauders.—*Magazine of Domestic Economy.*

PROVENDER.

Our farmers are beginning to understand that there is as much management necessary in taking care of a crop as in making one. Fodder, shucks, and corn-stalks, that formerly were only used to be *picked* by the cattle, and trampled into manure, are now carefully cut, soaked, mixed with meal, and fed away in troughs. Twelve years ago, we bought a barn full of shucks for $1 75, at a country sale, and were laughed at for our bargain; the same quantity, now, would sell for thirty or forty dollars. Corn-stalks, that used to be considered fit only for manure, are now found to make excellent food, when cut and steamed. The Editor of the Farmer in recommending the use of this article says, "We boldly venture upon the assertion, that if a bushel of stalks, cut into pieces of an inch in length, either *soaked* in boiling water, or steamed, with a slight sprinkling of salt, were given three times a day to each head of cattle, that they would maintain the animals in good keeping condition."

We verily believe, that, by a saving of that which used to be wasted, a third of the marketable crop is sold that was formerly required for home consumption, and, that by still greater attention, another third may be added to it.

CHANGE OF SEEDS.

We some time since copied an article from the Louisville Journal (a paper, by the way, whose agricultural department is proving its celebrated Editor to be a universal genius) recommending the importation of northern seeds, for the purpose of expediting the growth of plants. We ventured to express the opinion, that this object would be more effectually obtained by the use of southern, than northern seeds, and quoted some authorities which we thought sustained us in the position. The purport of those authorities was, that seed obtained and transmitted a quickening impulse from the climate and soil in which they were cultivated; hence, we inferred, that seeds, raised under the vegetative powers of a southern sun, would acquire a capability of growth that would stead them, for a while, even under less genial influences. But the Journal argues that the northern is shorter, quicker, and more vegetative than the southern summer, and, therefore, that we have drawn an erroneous conclusion from the premises. In this opinion, too, he is backed by an article from an able pen in the 12th number of the first volume

of the Planter. Struck by the plausibility of the argument, and borne down by the weight of authority, we were about to abandon our proposition, when we met with unexpected support in the following communication addressed to the Journal. Reinforced as we are by this statement of *facts*, we shall not retreat, yet, awhile at least, from our first position.

For the Louisville Journal.

Gentlemen,—You have frequently urged your agricultural readers to adopt the system of a frequent change of seed for every kind of crop. The utility of this is not disputed, as far as I have seen, by any of your correspondents; but there seem to be conflicting opinions as to the sources of supply—perhaps not so much as to the sources of supply, as with regard to the cause why such a change is beneficial. One writer, "A Jefferson Farmer," says that grain, the produce of a northern latitude, transported to a southern climate, there ripens sooner than a native. The reason is, that in the short summers of the north it had learned to perfect itself speedily, while the southern plant, relying on its long summer, got addicted to lazy habits. This, I believe, he stated as the result of his own experience; and I have no experience in a similar latitude to guaranty a counter opinion. In Scotland it has been long known and practised on, that seed from a warmer climate carried to a colder, ripen earlier than the native, and *vice versa*. The farmers on the head-waters of the Scottish streams are in the habit of receiving from the sea-side, annually, such a supply of seed grain as, when sown on their own farm, produces as much as will sow the whole farm the next year; that is, if they sow each year one hundred bushels, they will procure ten bushels from a warmer climate. These produce ninety bushels. Then the ten bushels of next year make their whole seed, and the growth of the farm is not sowed more than once. Potatoes are never a great crop when they ripen fast; so the farmers on the sea-side, to prevent this, get their potato plants annually from these highland farmers, who purchase their grain for change. And about the first of March, the half-way inns are thronged. There they meet and exchange loads; the sea-side farmers carrying potatoes down, and the moorland farmers taking oats, &c. up. P.

ORCHARDS.

We have insisted much on the practicability and policy of raising our own fruit. We are fully satisfied that our climate imparts a higher flavor to every kind of fruit, even the apple and the pear, than can be obtained in a more northern latitude. Nature, in truth, has done so much for us that we think it unnecessary to do any thing for ourselves, and here rests the mistake.

We have reason to believe that our exertions in this behalf have not been altogether fruitless, and further to assist those, who have determined to postpone no longer the setting out of a young orchard, we copy the following directions given by Mr. Buckminster, the experienced Editor of the Massachusetts Ploughman, to Mr. Parker, which we presume will do as well for Mr. Anybody else:

"To secure the *best* trees he must be the *earliest* man on the nursery ground—he should select none which have been growing *more* than three years since budding or grafting—take the most thrifty looking and those best shaped; those which prove clearly that they were not idle last season. When he has carefully taken up his trees, not by pulling so hard as to break the roots near the stump—he should bury them in some cool or shaded place till the first of May, unless the leaf puts out sooner; then the earth will be more warm and mellow and the roots may be carefully covered, in their natural position, with fine mould. One person should hold the tree while another is sifting on the mould, and the holder should occasionally shake the whole body of the roots that no crevices be left to expose them to the open air.

"In making holes for the trees it is not necessary to dig deep, and but very little of the subsoil need to be taken out; but to guard the body from the winds and the roots from too much warmth or desiccation, a mass of straw, stack hay, coarse manure, or something of the kind should be placed about the tree on the surface; this will check evaporation, keep the earth light as well as moist, and will prove a very efficient support against the winds, and far better than any stake to which they can be tied; for a little racking will never injure them while the litter is close about their roots. Some make a practice of staking up young trees to guard them from the cattle. But if cattle are to be turned in, *the stakes alone* should be set for them to rub against, since young trees are too costly to be used as cards for cattle.

"The trees are now well set and supported. What next? Shall the field be seeded with rye and grass and be reaped, mown, and pastured for four or five years to prove the trees and see how hardy they are?—a common *practice*, time out of mind—and to make it *perfect* the young trees, which are found standing at the end of that term, should all be pulled up and burned in a heap, for they will not be large enough for firewood.

"But Mr. Parker will take care to keep the

ground about the roots in tillage for many years if he would be repaid for his trouble; and he will think it no more than reasonable to treat a young apple tree, on which he has expended one dollar, with as much attention as he treats a hill of corn which costs him but one cent. For many years the grass must not be allowed to take possession of the soil; for by this ninety-nine young orchards in a hundred have been rendered wholly worthless.

"When trees are well set, and cultivated as well as a favorite field of corn usually is, they will grow one foot in height during the first summer! Yet most men who set out trees seem perfectly satisfied if they exhibit a single green leaf the first season."

NEW METHOD OF MAKING BREAD.

Among the new inventions and contrivances of which I have lately heard, is something which I believe bids fair to become universally useful to the city and country and the world, and that is, a new method of making good light sweet bread. All the world knows, that one of the most difficult and perplexing matters to housekeepers, is to have good emptings or yeast for bread. Now, the invention is this:—Take an acid like cream of tartar, I mean simply an acid in the form of a powder, and rub a sufficient quantity of this dry and powdered acid into a proper quantity of dry flour. Then wet the flour and put in your alkali, potash, or any fixed alkali. The valuable part of the discovery is this, the acid and alkali will not effervesce until the loaf is baked, when the acid is rubbed into the flour in a dry state. The experiment is worth trying. I assure you that a most delicious bread is produced, light, sweet, and good, in this manner, from any good flour or meal you use, wheat, rye, or Indian corn. Cream of tartar may be used and saleratus for the purpose of trying it. Nothing can be more healthful than this bread. The inventor is a baker by trade, and I believe it will come into use everywhere. Try it yourselves by rubbing into your flour, in a perfectly dry state, some cream of tartar, and then mixing the batter with whatever liquid you please, milk, buttermilk, or water, and adding a little saleratus. You will have an excellent, toothsome, and wholesome bread.—*Boston paper.*

From the Farmers' Cabinet.

HORN-AIL.

Mr. Editor,—Having persuaded myself that the practice of boring the horns and applying spirits of turpentine, &c. in the disease called horn-ail, which is so very prevalent in America, is entirely wrong in principle, and has the most pernicious consequences in practice, I deem it not improper to recommend, by the means of your valuable periodical, a system of cure by which, during a long veterinary practice, both in France and in Philadelphia, New York and Harrisburg, I have been successful in most cases; while by the common way of proceeding *no animal is saved*, some either not having been attacked by that disease, or getting cured by nature itself.

This disease is also called the "red water," or blood in the back or loins, and arises principally from cattle being at grass during the summer on lots which are very dry and without shade, and from their being exposed to excessive heat of the sun and to great cold in the winter time; there are various other causes, as moory pastures, moist weather, &c. to all which cattle in this country are generally exposed; sour and mouldy hay, the exclusive feeding on corn-stalks, also contributes a good deal to this disorder.

As this disease is of an inflammatory character, the application of spirits of turpentine and the like, which *produce* inflammation, is entirely wrong. Boring the horns is at most curing *symptoms* and not the *disease.* I recommend to every owner of cattle the following mode of cure, tried by me a good many times with success:

When the animal is observed to be suffering from this disorder, one or two quarts of blood, according to the size of the animal, are to be drawn immediately from a neck vein; then two table-spoonsful of the following powder are to be given three times every day, the powder being previously dissolved in a pint of lukewarm water; this to be continued until the animal recovers:

Glauber salts,	6 ounces.
Cream of tartar,	2 "
Purified saltpetre,	2 "
Powdered root of althæ,	1½ "

It is necessary besides, to rub the animal frequently during the disease, principally on the back. But if the animal should be costive, either of the following clysters is to be given:

Take a handful of camomile flowers, two handsful of flax seed; boil them in two quarts of water, strain them, and add eight ounces of linseed oil and three table-spoonsful of common salt. This clyster is to be applied by means of a syringe.

Should these articles not be at hand, take one quart of wheat bran, pour two quarts of boiling water on it, strain, and add eight ounces of flax seed oil and two ounces of common salt. This clyster is to be lukewarm when applied to the rectum or straight gut, by the means of a syringe or a fit-funnel.

JOSEPH FIEHRER,
Veterinary Physician.

Harrisburg, Oct. 6, 1841.

What affinity is there between this "horn-ail" and the well known distemper to which all

foreign cattle are subject in our region? The symptoms are very similar, and we believe the causes assigned for the one frequently produce the other. The recipe is worth a trial, especially as we know no other that can be recommended.

HERNLEY'S PATENT DOUBLE SHEARED PLOUGH CULTIVATOR.

This is a machine for hoeing corn and potatoes, cotton and tobacco, invented by a German Farmer in Pennsylvania. It is said to save more than half the labor usually bestowed upon those crops, and numbers testify, that, in the culture of potatoes, the saving of labor is equal to three-fourths of that usually applied.

"It finishes," it is said, "each row by once going over it, and the shears may be set so as to accommodate themselves to any distance between the rows, and give any desired form to the hills, either flat, round, or conical. With this instrument one man will, on an average, in one day, with one or two horses, hoe from six to eight acres of corn in the most approved manner."

We do not believe all that we hear, but if one-half that is said about this machine is true, it is invaluable to the southern planter. We shall keep our eye upon it and make further inquiries concerning it.

ONE NIGGER EQUAL TO TWO ENGLISHMEN.

An English minister happened not long since to be in New York, on his way to Washington, and behind his carriage there were two footmen dressed in livery. Their appearance first excited the attention, and then gradually increased the numbers of the crowd, till, at length, shouts and hurras were set up by the boys, who cried out, "Hurrah for the Englishmen! hurrah for the Englishmen! It takes two Englishmen to make one Nigger!" meaning that two English footmen were thought necessary to do the duty which they had been always accustomed to see one negro perform.—*Buckingham's American.*

"There is many a truth uttered in joke," and we are inclined to think that the foregoing anecdote is an illustration of the truth of the proverb. We are fully satisfied, that the most effective labor that can be introduced in the southern States, at least, is a coal-black negro. We know that the contractors on the James River Canal considered one negro equal to two Irishmen, which comes very near establishing the point.

A very intelligent Virginian, a devoted friend to agriculture, who has travelled over the best part of Europe, and paid great attention to the agriculture of Great Britain, declared to us, that there was no sort of comparison between the amount of work performed by our negroes and the best of the English laborers. We are satisfied that their institutions, not less than their advantages of soil and climate, enable the southern States to afford agricultural products cheaper than any other part of the world.

To the Editor of the Southern Planter:

Dear Sir,—The time has arrived, when we must contrive some plan to lesson the great destruction of wood that is consumed in our common fire-places, and in particular, those of our servants. The expense of transporting the wood alone, without taking into consideration the value thereof, is an immense tax on the farmer. But how this is to be remedied I know not, unless it can be by a cheap stove, constructed in some respects like the Dutch stove, but with a door sufficiently large to give light as well as warmth to the room, and which is the more necessary to our servants, as we cannot afford them candles to burn.

The art of making stoves has been brought to great perfection; but those that I have seen, although well calculated to add comfort to a chamber or a drawing-room, are not fitted for the accommodation of our servants. We want a cheap and durable article, and I hope that some of your correspondents will give us some useful hints on this subject. A FARMER.

Feb. 2, 1842.

CORN.

We pledged ourselves, in our last, for at least one communication on the cultivation of this important crop. To enable us to redeem this pledge, we applied to our old friend, Mr. Thomas Dicken, for the benefit of his experience. Our object is to make the Planter a *practical* work, and when we were requested by a subscriber to furnish directions for the cultivation of a crop, upon which a great many theoretical opinions have been advanced by men who never succeeded in making a good one, we knew no better way of serving him, than by applying to an individual, who had devoted his life wholly and solely to the cultivation of the soil, and who, from the humble station of an overseer, had raised himself by dint of skill and industry to the station of an independent landed proprietor. Mr. Dicken does not pretend to be a learned man, (indeed he

pretends to nothing, for his worth is only exceeded by his modesty), nor is he such in the usual acceptation of the term. But, if a thorough knowledge of his business, if the information to be gathered by a mind naturally strong and observant, devoted wholly for a length of time to a particular pursuit, can entitle a man to the character of being well informed upon that subject, then would we say, that, passing by mere theorists and users of high sounding terms, we had applied, for the desired information, to the most "learned" man of our acquaintance. In this opinion, too, of Mr. Dicken's agricultural knowledge, we are backed by the Henrico Agricultural Society, who awarded him the highest premium offered at their fall meeting for the best cultivated farm.

The following is the amount of the advice offered by Mr. Dicken to our correspondent:

Plough your land well and deep, if possible, during the fall and winter, especially if it be stiff and wet. Harrow it freshly in the spring, and, with a single plough, throw two furrows together in ridges, five feet apart—level down the top with a light harrow—open your rows on the top of the ridge, and plant your corn from two to two and a half feet apart, according to the strength of your land—cover it to the depth of two inches, if planted early, and a little deeper if put in later, when the ground is warmer—follow now with your manure, and sprinkle it as you can afford, all along on the drill, and leave it uncovered on the surface.

As soon as the corn has grown about two inches out of the ground, run a furrow close on each side of it with a single plough, turning the earth from the corn, and ploughing deep, say six or seven inches—follow with the hoes, and weed it clean. As soon as the corn gets foul again, run a furrow on each side, turning the earth *towards* the corn, and lapping the furrows; this smothers the grass, whilst the corn will be too high to be covered up—continue then to plough up the whole space between the rows. You are now done with the plough. When the grass again makes its appearance, run your cultivators between the rows. A cultivator with three teeth may be worked as deep as the single plough, especially, if the land has been well broke—follow with the hoes, and weed it thoroughly. The cultivation is now completed.

It is *possible*, that the crop may sometimes be benefitted by another running of the cultivators, but if the work has been well done, such a rain, as would bake the land, or grow the grass, would make the corn.

Never fail to work your land on account of dry weather, but be very cautious of stirring it when it is too wet.

Mr. Dickens cultivates a highland, grey soil, moderately light; flat or meadow land he would always bed. He plants, and prefers, an improved species of the old fashioned gourdseed. He selects his seed with great care from the best stalks, taking only the upper ear. He prefers planting on ridges, because, he likes to get his crop as forward as possible; he thinks the ridges, becoming dryer and warmer by being drained, have a tendency to quicken vegetation.

He prepares his seed by adding a pint of tar to five gallons of boiling water, and stirring in the corn when it becomes lukewarm. It is then taken out, and rolled in ashes—the tar protects it from birds, and the ashes counteract the injurious action of the tar, if any exists, in retarding vegetation.

Mr. Dicken prefers one stalk to every two feet to closer planting, averring, that, in an average of years, it will make the most corn.

So much for Mr. Dicken's mode of cultivating corn. Although we have great faith in the man, we by no means intend to assert that his practice may not be improved, and we hope that those who differ from him, will throw all the light they can upon a subject so fraught with interest to the farmers of Virginia and the South.

For the Southern Planter.

Mr. Botts,—During a trip to Richmond and its vicinity, last summer, I heard a good deal of complaint relative to the rotting of grapes after they had gotten nearly ripe. In fact, I saw very many fine looking vines, heavily laden, but from which scarcely a sound grape could be gathered. On returning home I found my vines also heavily laden, and that too with sound, nice grapes.

The reason of this, I think, is, my vines are trained *high*—the different branches three feet distant from each other are suffered to run as far as nature permits them. It is evident, if managed in this way they occupy more ground, which is a matter of no small importance to persons in town or its vicinity; but if a smaller number of vines will answer the same, and perhaps a better purpose, where is the loss? The wind in March blew down one of my vines, which, falling over the fence was very much injured by the cows. This vine grew very thick

and bunchy. It also bore very abundantly, but the grapes all rotted and fell.

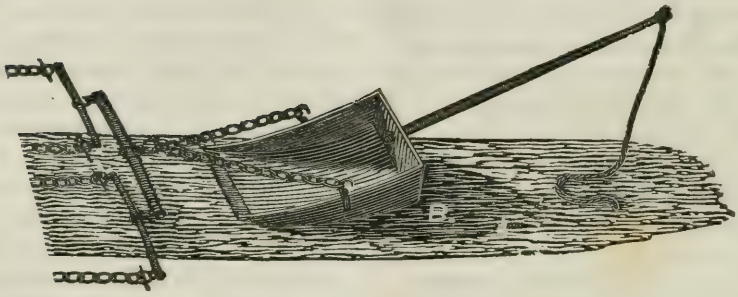
My vines were obtained from the neighborhood of Richmond, and are of different kinds.

Respectfully, P. B. WHITE.

Nottoway, Va. January, 1842.

P. S.—Since writing the above, I have observed in the last number of the Planter, "A Sovereign Remedy for the Mange in Hogs." I have succeeded, more than once, in curing this disease, by greasing my hogs with the outside of old, fat bacon. But little preparation is required. The hogs, of course, must be caught and held fast. Then take your slice of bacon and rub them all over, particularly the parts most affected. A little fire may be necessary to warm the bacon. P. B. W.

MOLLEBART.



The implement represented in the engraving, well known to most of our readers as a "scoop," or "scraper," figures largely in English works of agriculture, under the more imposing name of Mollebart. Here, it is confined to the canal and road contractor. In Europe, it is used by the farmer, for the purpose of levelling the mounds and ridges, and filling up the sinks and hollows of his fields. Wherever dirt or loose stones are to be removed, it is infinitely preferable to carts or any other contrivance for the purpose. Some persons may never have seen, or heard of, this simple implement, whilst few, perhaps, have applied it to the *agricultural* purposes to which it is adapted. Whenever it is used for levelling ridges or hillocks, care should be taken first to remove and afterwards to replace the surface soil.

The Mollebart is used as an agricultural implement, especially in Holland and Flanders, where it is much esteemed. It should be made of thick, strong plank, the bottom covered with thin iron bands or plates, and the front edge made thin and strongly plated with iron. The bottom should be made rather convex, so as to slide more easily. Two iron hooks are securely fastened to the centres of the sides, from which a couple of chains proceed, and unite in a double bar in front, as is exemplified in the engraving. The handle is five or six feet long, and the rope fourteen or fifteen. The operator approaches the earth to be removed, bearing upon the handle, to keep the front raised and free, until he wants to fill the scoop, which he effects, without stopping his horses, by simply elevating the handle, thereby entering the front or cutting edge. As soon as this is accomplished, he again depresses the handle, and proceeds with his load to the place of deposit. To empty the vehicle, he elevates the handle, and lets it go, retaining hold of the rope. By this operation, the front edge catches in the earth, and the scoop is drawn over and reversed, emptying the load completely out. The rope is now used to draw the scoop back to its former position, when the driver proceeds to fetch another load.

A skilful hand will spread the earth at the same time that he deposits it; this is done by holding the rope so that the handle shall not fall over, at once, but remain for a short time in an erect position. The load is thus delivered gradually, and laid level by the edge of the instrument scraping over it.

The usual size of a scoop for two horses is about three feet every way—in such, a load of about five hundred pounds will be removed at every turn.

DRIVING NAILS INTO HARD WOOD.

We have lately seen another experiment of driving nails into hard seasoned timber fairly tried. The first two nails, after passing through a pine board, entered about one inch, and then doubled under the hammer; but, on dipping the points of the other six or eight nails into lard, every one was driven home without the least difficulty.

Carpenters who are engaged in repairing old buildings sometimes carry a small lump of lard or tallow for this purpose on one of their boots or shoes.—*New Genesee Farmer.*

The Editor of the Mechanic suggests that that which causes the nail to enter readily will occasion it to draw out easily. This may be the case with lard or oil, but if the driver will merely wet the nail in his mouth, the same facility of entrance will be effected, and the rust, that ensues, will rather increase the tenacity of its hold. A small piece of bees-wax rubbed over a wood-screw, (an iron screw that works in wood is so called,) will occasion it to turn, both in and out, with great ease. Its threads are generally sufficient to give it hold; and it is sometimes a convenience to turn it out readily. This may be effected at any time if the screw was put in with wax.

VIRGINIA BOARD OF AGRICULTURE.

We have awaited with, some anxiety, the action of our Legislature upon the bill proposing to pay the expenses of the members of our Board of Agriculture; for we were well assured, that, without a passage of that bill, we would never see another meeting of that Board. It was asking rather too much, even of Virginia liberality, that gentlemen should leave their homes to come here, *at their own expense*, for the public good; and they very naturally felt that the honor of a station, which was so little appreciated, would hardly compensate them for the sacrifices it involved. We know the almost peculiar prejudices of our people against legislative interference, and we confess ourselves not altogether free from the prevailing feeling. When this Board was first organized, we did not object to it, because, although we anticipated no good, we could not see any evil likely to arise from it. But since we witnessed the zeal, the ardor, and the ability, manifested by some of the members of this Board, which has been so happily selected, and since, moreover, we have read in their report a detail of the plan they design to pursue, we unhesitatingly pronounce that, in our opinion, it is to do much for Virginia agriculture. They propose to obtain and report a full account of the agricultural statistics of the State. For this purpose, they lay the State off into eight districts, and assign a member of the Board to each; it is his business to propound a list of printed inquiries to the best farmers in his district, and to use all other means in his power to procure satisfactory answers to those inquiries. The information, thus obtained, will be furnished to the Board at its general meeting, whose business it will be to submit to the Legislature a report, founded upon these materials. The plan is exactly what we have heretofore chalked out for ourselves; and we cannot, therefore, hesitate to express our approbation of it. We, too, design to perambulate the State, collect agricultural facts, and report them to our readers. We, therefore, start in the same race, and, if one might be allowed to jest with so grave a body, we would advise their excellencies to look out for the *distance pole;* although, we know that there is one amongst them, at least, an active, long-legged strider, that will keep us busy. But to their superiority of numbers and intellect, we oppose the active energy of an individual, devoted to a profession, upon which he is dependant for a livelihood. If, under such circumstances, they come within bowshot of the Planter, they may flatter themselves with the result.

It will be hard, indeed, if, between us, the agriculturists of Virginia are not enlightened.

But, jesting aside, we are delighted to find that these able gentlemen have devoted themselves to so practical an object, and one they are so well calculated to effect. We flatter ourselves, that the Planter, enriched with the productions of the Virginia Board of Agriculture, is destined to vie with any of its numerous and able contemporaries.

The following is the list of subjects on which it is proposed to propound inquiries and obtain information:

I. Geographical State.
1. General geographical description.
2. Climate.
3. Surface and soil.
4. Minerals.
5. Water.

II. General Management of Land.
1. Quantity of arable land, of meadow, of wood, of waste land.
2. Size of farms.
3. Rotation of crops, and the kind of cultivation.
4. Depth and manner of ploughing, for preparation of different crops.
5. Tillage of crops, and general management of each important one, from the seeding to the consumption or marketing.

III. Products and Prices of Crops.
1. Usual produce per acre of different large crops, and general selling price.

IV. Implements.

V. Fencing and Enclosing.

VI. Tillage of Growing Crops.
1. General management, seeding, harvesting, marketing.

VII. Grass and Grazing.
1. Natural meadows.
2. Watered meadows.
3. Mowing and hay.
4. Artificial grasses, and their comparative value for hay or grazing.

VIII. Live Stock.
1. Teams, or laboring animals.
2. Animals raised for sale or farm supplies.
3. Prevalent diseases, and their remedies.

IX. Dairy Management.

X. Woods and Waste Land.
1. Description.
2. Uses and product.

XI. New or Recent Processes or Improved Practices in Agriculture.

XII. Obstacles to Improvement,
Including the operation of the laws or governmental regulations.

XIII. Miscellaneous Observations and Statements of any thing of interest not included in any query.

For the Southern Planter.

Fredericksburg, Va., Jan. 26, 1842.

Dear Sir,—It may interest some of your agricultural readers to know the value of property in Virginia a hundred and nineteen years ago. For this reason you have the following copy of a letter from a man who was thoroughly acquainted with the subject.

Would you not do well to urge strongly upon the public the propriety of preserving by means of the press, such venerable records as may be mouldering away in old chests stowed in garrets and other obscure corners? Time is doing the work of the Sybil. Every day is silently but steadily lessening the amount of information which once gone can never be supplied. The general, leading points of our history, it may be said, are already secured—but it may be doubted whether the minuter details do not exercise as important an influence upon our welfare; for history has been aptly termed the finger of the past pointing out the course of the future, and it is as necessary to our comfort and security to become acquainted with the small sand-bars and lesser currents in the river of life, as with the islands and continents in the great ocean of human existence.

Your friend, respectfully,

J. Minor.

Note.—Mr. Micaja Perry, to whom the letter was addressed, resided in Loudoun, and was an agent of the proprietors of the Northern Neck.

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July ye 13*th*, 1723.

Mr. Micaja Perry:

Sir,—I have already sent you an inventory of ye —— estate. That it may appear the clearer before you I now send it you distinguished under its several species by w'ch you and the gentl'n concerned will be the better enabled to pass your judgments upon the value of it if they are in earnest to sell and can make a good title. However, I shall give you here the best acco't I can how the prices of Virginian estates run from man to man.

As for negroes I suppose you know the prices they are sold at well enough. Two years ago Colo. Page bought* Bombesa men slaves, the finest that I ever saw, be tween ab't 18 and 28 years of age, not one exceeding thirty I dare say, of Capt. Francis Willis, agent of the African Company, at seventeen pounds per head. Last year I bought men for twenty; women eighteen, and girls of 10 and 12 years of age for 10 pounds per head. This year I know of no large quantities having been sold together. The small folks and middling people have been the only buyers. I have known Leves all single choice men bought for 20£ apiece. The choicest have gone at 40£. This hath been the rule with the sellers as far as I have heard. I doubt not, would I have taken a quantity, I might have had them considerably cheaper. You must know, the slaves that come from Gambia, such as Colo. Page had, are of a much larger size and have more sense and are more used to work,

* The figures are illegible.

than any other. I would freely give at any time 40 sh. a head more for them than for the Cites.

As for cattle, there is no such thing as selling a stock together, for money. The common price for any young, fat cow in killing time, is thirty-five shillings cash: and for a steer, seven years old, fifty shillings. This you may be informed of by your masters when they buy fresh meat.

The horses and mares, you must understand, are of very small value among us. They swarm upon us, and are degenerated into such runts, that you may buy them as they run almost for anything. Not many years ago I sold six out of my pasture, to Doctor Lomax, of three years old, for shipping off, at 20s. per head. Some of these, you will observe, are very old, and some very young.

For hogs, I do not know what to say of them. As they run in the woods we esteem them little better than vermin, and 'tis not common to put them into the inventory of our estates. Indeed, after we have spent a barrel of corn upon them per hog to make them fit for killing, they will fetch you from 20s. to 25s. per head, the barrows and speyed sows, current money.

For the household goods, 'tis very old and mean, as you may very well conceive, having been under the use of such various hands.

Nine of the negroes, as I have already observed, are so much past their labor that they are rather a charge than anything else. Their levy and clothes come to more than they make. There are three of them at one place put in for a share, and at no place under two for a share and a lusty girl or boy to help out with their work, to boot; and yet the overseers grumble very much to allow anything for them.

The lands and plantations you have often had a particular account of. When Carey has got that plantation away, as no doubt (if he can make his title good,) but he will, though I will defend it to the uttermost if you will send me such orders, there will be but nineteen hundred acres, or thereabout, every plantation cleared quite out, and no timber left for building.

This is a true representation of this estate. Old Capt. Willis knows as well the value of a Virginian estate as any man. Let him but consider the great difference there is between land in those parts of the country and Glos'ter, where he lived; the low ebb that Tob'o is at; and the little income we make at this day of our Virginian estates; and I could almost agree he should set the value upon it himself.

I must confess that in consideration of having had this estate so long under my government; that the best of the slaves went hence with my brother's daughter, Loyd's first wife, and are very much related to several of my families of slaves; and having lands in plenty to settle them upon; I am very desirous to be the purchaser, and will pay the money in as little time as they can reasonably desire it; and will give as much as any other person will offer *at* the estate entirely together: and I hope, if not for my sake, at least for my son, whom they seem to have very much in their esteem, and to whom this estate may probably come, they will let me have the first refusal of it.

Thus you have this affair as fully before you as I can set it, until I hear further from you about it.

I am your most humble servant,

ROBERT CARTER.

This is not the first curiosity that the elegant researches of our old friend have wrested from the wreck of antiquity. We, in common with the literary world, are indebted to him for many similar favors.

The article is not only curious, but instructive. We can gather from it the loose husbandry of our forefathers, the necessary attendant upon the consolidation of inordinate landed estates.

Notwithstanding the careless and wasteful system of cultivation that prevailed one hundred and forty years ago, the Virginia planter of that day invariably got rich; and how? By ripping up the golden goose: by robbing the rich virgin earth of all her fertility, and coining her soil into money. We must now repair the errors of our forefathers, and convert the money they have left us, into the soil, of which they robbed us. It will be a good exchange. The soil breeds faster than money, prolific as *it* is, at the present day.

As to the value of property, as here set forth, Mr. Carter's statements must be received with some grains of allowance. In the first place, the currency had not been inflated, and twenty shillings of 1723 meant something very different from twenty shillings of 1842. Again, if our friend will excuse the imputation upon the character of his "progenitor," we must remember that Mr. Carter is valuing property he is, evidently, very desirous of purchasing, and we think that other records of the value of agricultural articles at the time will prove, that purchasers, one hundred and forty years ago, were imbued with the same spirit of "cheapening," that they frequently manifest, at the present day.

MANURES.

We have received an excellent communication from Mr. James T. Jones, of Fluvanna, whom, by the bye, we take to be a thoroughly practical farmer, objecting to a plan of manuring recom-

mended by J. R. G., in a former number of the Planter.

Mr. Jones makes two prominent objections to the recommendation of J. R. G. to deposit litter at once upon the surface of the land, instead of first subjecting it to the trampling process of the farm yard. The first is that cattle would be deprived of the bedding, that is extremely conducive to their comfort, both in winter and summer, and secondly, that much of this litter, as corn-stalks, for example, would require a great length of time for the division and decay, necessary to their incorporation, and fertilizing effects. On the other hand, these articles, placed beneath the feet of your cattle, are cut up, and at the same time, become the absorbents of manure and urine, that would otherwise be lost. He goes on to say,

"I am no chemist, Mr. Editor, and, of course, can't tell, in all cases, the why and wherefore of these things, but I have tried, to the utmost of my means, for several years, most ways of making manure, and when and how to apply it. I have hauled out leaves and trash and spread on the surface. I have hauled earth of different qualities—ditch banks, some in the cattle-yard to mix with the manure, other immediately out to the land—I have hauled sand to clay, and clay to sand—in fact, the business of manuring in some way, (all ways are good, but some better than others,) has been my only *successful* means of restoring old worn-out land to a state of fertility. Upon the whole, I would say, to save labor, haul out all rich earth, ashes, every vegetable litter that is rotten, at once to the land; but all such things as corn-stalks, unrotted leaves, straw and weeds, into the stables, cattle-yards, and hog pens. For every load of this weak litter, almost useless of itself, (except for a covering to retain moisture,) you will carry out a load, at least, of good strong manure; provided, always, you keep a sufficiency of well-fed stock—and, is this not an equivalent, at least, for the additional labor? I agree with 'J. R. G.' as also several, nay, most farmers, as to the propriety of surface application, but I prefer a slight admixture with the surface, more especially, if the manure is fine. For a time, I carried out, spread and fallowed in. This I did to avoid running the teams and carts upon the land after planting. But I have no doubt by this mode I lost half. I now haul out as soon as I think the manure has acquired sufficient strength, no matter whether rotten or not, deposit in piles, plough, when the time comes, then spread the manure before the harrow or cultivator. It is impossible to adopt a plan against which no objection can be seen, but we must do some way, and can only select that course least objectionable."

Having held frequent conversations upon the subject with our correspondent, J. R. G. we will undertake to say, without waiting to consult him, that he has been slightly misunderstood, and that he and Mr. Jones are, in truth, not very far apart in their views. If we do not misapprehend, when J. R. G. speaks of the propriety of hauling out litter at once upon the land, he alludes only to that portion which is frequently hauled in, over and above what is required for bedding, to be worked up and trampled over in the farm-yard. From what we know of his opinions, we would as soon expect him to deprive his stock of their *food* as their *beds*. We believe, though, that he thinks the quantity of bedding may be much lessened by keeping cattle in stalls instead of yards. Their dung and urine he would collect, and throw into his compost heap. Consequently, he needs no other absorbents. What is to be done with the excess of litter and vegetable matter that may be industriously collected about a farm? Why, says J. R. G. haul it out and deposit it upon your land at once. By this means, you secure all the fertilizing properties of the litter, and, moreover, have the use of it as a "retainer of moisture," during the time that it would, otherwise, be idle in the farm-yard.

The following, from the Genesee Farmer, is not only scientific, but plain and practical. It is, we presume, from the pen of that distinguished gentleman, the Rev. Henry Coleman, so well known for his contributions to agriculture.

We hope no one will be deterred by the scientific title from a perusal of the article, nor by the little trouble that is required from instituting the experiments recommended.

AGRICULTURAL ANALYSIS.

To determine the value of soil, or to be able to correct any fault in the original constitution, or any deficiency arising from improper cultivation, it is necessary that the nature and proportion of the substances composing it should be understood. In agriculture this examination is termed analysis; and in a simple, yet still effectual method, may be practised by every farmer. The implements used are a pair of scales, accurate to the tenth part of a grain; a crucible; some muriatic acid, and a few small vessels of china or glass.

The earth to be tested by the farmer, should

be taken from a few inches below the surface, and be an average specimen of the field, or the soil to be examined. The quantity to be examined, say two or four hundred grains, is to be slightly pulverized or well mixed together. Put of this, two hundred grains in a crucible, and heat it to three hundred degrees of Fahreinheit, or bake it in an oven heated for bread for fifteen minutes; cool and weigh. This will show the absorbent power of the soil, and as this is depending mainly on the animal and vegetable matter, if the loss is considerable, it is decisive proof in this respect of fertility. The absorbent power varies from one to twelve per cent.

After weighing, heat it again in the crucible to a red heat, and until the mass shows no bright or sparkling particles, stirring it with a glass or iron rod; cool and weigh, and the loss will be the animal and vegetable matter in the soil.

Take two hundred grains of the dried earth, mix it thoroughly with a gill of water, by stirring it for several minutes. Let it stand for three minutes, and turn off the muddy water into another glass. Dry the sediment in the first glass at high heat, weigh, and it gives the silicia contained in the soil. Let the water turned off settle clear, turn it off, dry it at a high heat and weigh: this gives the alumina or clay.

Put into a suitable glass or flask, one-fourth of a gill of muriatic acid and water in equal proportions, and balance the scales carefully. Put into this mixture one hundred grains of the earth, let it stand till all the effervescence has ceased, which will sometimes be an hour, or more; carefully note the weight required to again balance the scales, and that may be set down as the weight of carbonic gas expelled, say six grains. Then as forty-five is to fifty-five, so is this weight to that of the base, or the lime. In this case the lime would be seven and one-third per cent.

To ascertain if the earth contains iron, stir the muriatic acid and water with a strip of oak bark, and if iron is present in the liquid, the bark will turn dark. To ascertain the quantity, put in prussiate of potash, till it no longer forms a blue precipitate, let it settle; heat the deposit to redness, carefully weigh the remainder, which is oxide of iron.

To determine the presence of gypsum, take one hundred grains of earth, mix one-third the quantity of powdered charcoal, keep it at a red heat in a crucible for half an hour. Then boil the earth in a pint of water for thirty minutes, filter the liquor, and expose it for some days in an open vessel. A white deposit will be sulphate of lime, and the weight will determine the proportion.

These processes are all simple, and can be performed by any one. By them we obtain, 1st, the absorbent powers; 2d, the amount of animal vegetable matter; 3d, the silicia or sand; 4th, the alumina, or clay; 5th, the carbonate of lime; 6th, the oxides of iron; and 7th, the gypsum, or plaster of Paris. The salts exercise a great influence on vegetation; but as they principally depend on the animal and vegetable matter in the soil, and as the determining their qualities and kinds are too difficult for the analysis of the farmer, the processes are omitted The above ingredients are all that exert a marked influence on the fertility of soils, and on their proper proportion its goodness depends. If soils contain too much silicia or gravel, they are porous; and if too much clay, retentive. The last is usually the worst fault, and may be known by the water standing upon it after rains, remaining unsettled for a long time, owing to the clay held in solution. Wheat winter kills, on such soils; on calcarious, gravelly ones, rarely. Good soils usually contain from sixty-five to seventy-five of silicia; from ten to sixteen of alumina; from four to ten of lime, and varying proportions of vegetable matters, animal and mineral salts, &c. The analysis of soils, forms one of the most decided steps in the improvement of agriculture, as it clearly points out what is wanting to remedy any defect, and give ease of working, and abundance in product. Every farmer should understand the nature and composition of his soils, and may do so with little time, and at a mere trifle of expense.

THE POTATO.

We find several of our most valued northern exchanges agreeing in the superiority, after all, of an old variety of potato called the La Plata or long red. Amongst its other valuable qualities it is said to retain its distinctive traits and characteristics in spite of neighboring cultivation. This circumstance is explained by the fact, that it is later than any other variety, and consequently, is in bloom when no other potato is in the same state. A mixture of two varieties, it is supposed, can only take place by the fecundating action of the pollen which is evolved and received only in a state of bloom.

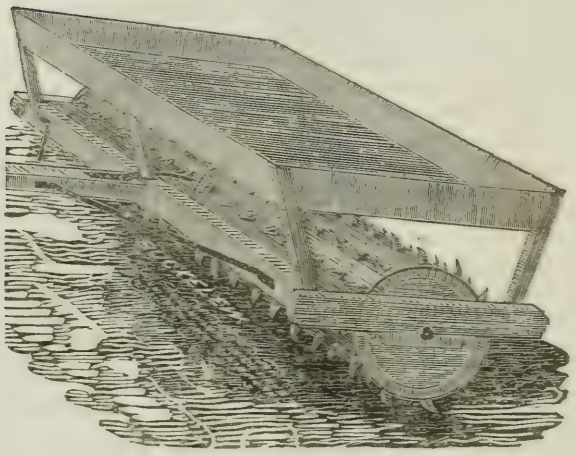
From all we can gather from the best authorities we should prefer this variety to any other for our late crop.

MILLET.

A gentleman of Chesterfield has deposited with us, for sale, a small parcel of millet seed. It is a crop with which we are personally unacquainted. It is said to make very fine hay, and to be admirably adapted to our soil and climate. An unknown writer, in the January number of the Cultivator, recommends it to southern farmers

as more profitable than herds-grass, timothy, or clover. He says, "For ten years past I have never failed to obtain a good crop of *millet*, when the ground was *rich* and properly prepared; viz: by twice ploughing, and harrowing clean. I usually sow a bushel to the acre, and cut it as the seed begins to turn yellow: cure it as any other hay, and horses prefer it to clover or timothy. It matures in about sixty days, and may be sown from April until the first of August."

CONKLIN'S ROLLING HARROW.



We have favored our readers with a cut of what is called, to the north, Conklin's revolving harrow, of which a correspondent of the Albany Cultivator speaks in the following terms:

Conklin's Rolling Harrow.—I must not withhold my tribute of praise to this admirable implement, though rather expensive; freight, &c. about $120. Mine has been in use five years, and passed over one hundred and fifty acres or more each year, and is now as good as new; having, as I believe, been worth the cost every year. In addition to scarifying meadows, rolling small grain, &c. I pass it over my *corn*, when from two to six inches high, and consider the operation better than a ploughing, and will easily go over ten acres in a day. It leaves it in fine order for ploughing. Some of my neighbors, seeing it, have substituted a log with spikes, which answers very well, and costs but little.

I think the smooth roller very essential to good farming, and am glad to see them getting in fashion generally.

I am, your obedient servant,

N. B. Moore.

Augusta, Ga., Nov. 11, 1841.

We know not to what part of the implement Mr. Conklin sets up an exclusive claim. A spiked roller has long been in use in this part of the country, and is much esteemed by many judicious farmers. Some of our best wheat growers use it every spring after the frost is out of the ground, to loosen the roots of their wheat and grass. For this purpose, a large gum log is prepared about four feet in length and eighteen inches in diameter. It should, if possible, be passed through a turning-lathe, and an iron gudgeon set true in each end—let the gudgeon be an inch and a half in diameter, and turned off also in the lathe. Holes should now be bored with a half-inch augur in the surface of the roller, four inches apart, those in one row breaking the row before it. A blacksmith will manufacture the teeth of square iron, nine inches long, with a shoulder four inches from one end, and five from the other; just under the shoulder, the teeth should be three-quarters square, and tapered to either end—the short, ragged end should be driven in the roller, with a sett, to the

shoulder: the long end may be either curved or straight, at pleasure. A strong wooden frame must now be made, in which the roller may revolve. A hole bored straight and true through the end pieces, will make a capital box for the journals of the gudgeon. It is well to so construct the frame that weight may be added or removed at pleasure.

We have been thus minute in our directions, because, we desired to enable a farmer, by means of a common blacksmith and carpenter, to construct an implement, at a cost of thirty dollars, that will answer every purpose, we believe, of Mr. Conklin's $120 machine.

This implement is not only more effectual in breaking the clods of newly ploughed ground than the common harrow, but is invaluable, as we before hinted, for working wheat and grass.

COTTON GIN.

The gin of the celebrated Whitney, to which, by the bye, the cotton crop owes much of its importance, is likely to be superseded, it is said, by an improvement invented and used at Lowell. This new machine has been carried to England, and is now at work in Leeds and Manchester, affording another example of Yankee ingenuity.

REAPING MACHINE.

Mr. Solon Robinson seems to think that Mr. Hussey's reaping machine is quite a pretty thing, but nothing in comparison with a machine, somewhere in the west, that gathers, thrashes and fans the wheat at one operation. If it travels through the Yankee States, we may expect to see it so improved as to grind and eat the grain before it gets to the south.

SCALDED OR CLOTTED CREAM.

Take a pan of perfectly sweet milk, twelve hours old, with the cream on; stand it on a stove or furnace over a gentle fire till slightly scalded, "when a ring will appear in the cream of the size of the bottom of the pan;" then take it off and let it stand till cold; skim off the cream and it is fit for use. When used as an accompaniment with fruit, tarts, &c. it is sweetened to suit the taste. This cream is esteemed a great luxury in London. It is brought in by dairymen, and sold at a high price.—*New Genesee Farmer.*

CLEANING GLASS.

The French mode of cleaning fine glass utensils, &c. gives them great brilliancy. It is done by finely powdered indigo, and dipping into it a moistened linen rag, with which the glass must be smeared, and wiped off with a perfectly dry cloth. As a substitute for this, fine sifted ashes, applied by a rag dipped in spirits, will also answer very well; but Spanish white is apt to roughen and injure the glass.

The Louisville Journal states that the vineyard of J. Davis, Esq. of one acre and a half in extent, produced this year 1170 gallons of the pure juice of the grape. In Europe 400 to 500 gallons per acre are considered an extraordinary yield.

LEGISLATIVE ACTION.

In our last, we published an article on this subject, from an anonymous correspondent, signing himself an "Old Virginia Farmer." We have this morning received a communication, signed, "Rusticus," animadverting upon the piece in terms which we decline to publish, simply for this reason; it would necessarily lead to a rejoinder of a character entirely personal. In taking this course, we hope that "Rusticus" will understand that we intend no disrespect to his communication, nor do we even mean to intimate, that its extreme causticity is not warranted by the character of the article against which it is directed. The truth is, Rusticus is too liberal, when he absolves us from all blame in the matter, and most egregiously wrong in his supposition, that we consider ourselves bound to print all we receive. The article, we confess, ought to have been rejected for its use of *epithets*, of which Rusticus, so severely, and so justly, complains.

Our excuse for admitting the terms, "fools" and "brawlers" to be applied through the columns of the Planter, is, that we looked upon the whole article rather as a playful piece of badinage, than a serious intention to insult those who differed in opinion with the writer. Upon a re-perusal, we perceive more of venom and acrimony than we at first discovered, and can readily understand that it is calculated to insult those, who, like "Rusticus," have borne an active part in invoking the aid of legislative action for agriculture. The piece has attracted much commendation, for "Rusticus" is wrong in supposing that the author is singular in his opinions, and he is the only one who has as yet objected to the tone of the article; nevertheless, we recognise the justice of his complaint, and seek to render him all the retribution in our power,

by confessing our error, and assuring him that this oversight shall only render us the more vigilant to exclude every thing of a personal character from the columns of the Planter. Free, open and *spirited* communications we solicit; but harsh and vituperative denunciations, we shall always endeavor to exclude. Whenever, as in the present instance, a piece of such a character accidentally finds its way into our columns, we shall always prefer to take the burden of an apology on our own shoulders, to publishing a reply of a like character, thereby relieving our readers from all the unprofitable weariness of a personal controversy.

For the Southern Planter.

TOBACCO.

Fluvanna County, Jan. 26, 1842.

Mr. Editor,—You gave us in one of your late numbers, a short historical account of the tobacco plant, (technically nicotiana tabacum.) I propose, by your leave, to continue the subject, more as a matter of curiosity and amusement, than of instruction, for your numerous readers.

I will say nothing about its botanical description, and but little of its medical qualities. A most strange infatuation must have governed the first person, who could have persisted in its use long enough to have overcome its most disgusting taste. It is a strange fact in animal economy, that the most nauseous and unpalatable substances after long and continued use will become very pleasant to the palate. This plant was originally found in the hands of the native American savage, as an article of luxury; now it is sought for with great avidity by civilized man in almost every part of the globe. The priests of some tribes swallowed the smoke of this plant to excite in them the spirit of divination; they inhaled it until it produced a stupor of many hours. When they had recovered from it, they said they had held conference with the Devil, and had learned from him the course of future events. Their physicians also intoxicated themselves with it, and pretended that they had been admitted into the council of the gods, who revealed to them the event of diseases.

In 1559 tobacco was sent into Spain and Portugal by Hernandez de Toledo, and from thence it was carried into France, as a curiosity, by Jean Nicot, or Nicotius, ambassador at the court of Lisbon, whose name is now immortalized by its application to this genus of plants. From this period, its use spread rapidly in Europe—so much so, that the constituted authorities, both of Church and State, thought it necessary to interpose, that they might stop the extravagant indulgence in it, by the most rigid prohibition. James the First, of England, besides writing a book against it, called his "Counterblast to Tobacco," gave orders that no planter in Virginia should cultivate more than one hundred pounds. Pope Urban the Eighth published a decree of excommunication against all who took snuff in the Church. Smoking was forbidden in Russia under penalty of having the nose cut off. In Switzerland a tribunal was instituted for the express purpose of trying transgressors in Tobacco. A Turk who was found smoking in Constantinople, was conducted through the streets of that city with his pipe transfixed through his nose. In the old Massachusetts colony laws, is an act imposing a penalty upon any one "who shall smoke tobacco within twenty poles of any house," or who shall "take tobacco in any inn or common victualling house, except in a private room, so as that neither the master of the house, nor any guest shall take offence thereat." In the early records of the Harvard University is a regulation of this kind, "No scholar shall take tobacco, unless permitted by the President, with the consent of their parents and guardians, and on good reason, first given by a physician, and then in a sober and private manner." It had its advocates at this time among the learned—Castor Duranti and Raphael Thorius both wrote Latin poems in its praise—the latter, one, entitled a "Hymn to Tobacco," in which he styles it, "the gift of Heaven and the ornament of earth." It obtained the reputation of a general panacea, almost for the whole catalogue of diseases which man is heir to. Dr. Venner, in a work, entitled, "*Via recta ad vitam longam*," published at London in 1638, gives a summary of the injury done by tobacco. "It drieth the brain, dimmeth the sight, vitiateth the smell, hurteth the stomach, destroyeth the concoction, disturbeth the humors and spirits, corrupteth the breath, induceth a trembling of the limbs, exciteth the winde pipe, lungs and liver, annoyeth the milt, scorcheth the heart and causeth the blood to be adusted. In a word, it overthroweth the spirits, perverteth the understanding, and confoundeth the senses with sudden astonishment and stupiditie of the whole body." A poetical phillippic, "Tobacco Battered," was published in the reign of King James, by Joshua Sylvester, in which he compares tobacco to gun-powder, and pipes to guns—making the mischief of the two equal. James the First, in his "Counterblast," warns his subjects, in a most earnest manner, "not to sin against God, and harm their own persons and goods, and render themselves scorned and contemned by strangers, who should come among them, by persevering in a custom loathsome to the eye, hateful to the nose, and baneful to the brain."

Tobacco has combined in it a great variety of constituents—and strange to tell, some animal matter, also, a peculiar acrid, volatile, colorless

substance, soluble in water and alcohol, not found in any other vegetable. Mr. Brodie found, by experiment, that the oil of tobacco, which Mr. Brande obtained by distillation of the leaves, and which he calls the empyreumatic oil, had a most deadly effect on animals. He says, that two drops of it, applied to the tongue of a young cat with an interval of fifteen minutes occasioned death. A single drop suspended in an ounce of water and injected into the rectum of a cat, produced death in five minutes. One drop suspended in an ounce and a half of mucilage and thrown into the rectum of a dog, produced violent symptoms, and the repetition of the experiment killed him. ORONOKO.

CURIOUS EXPORTATIONS.

The people of the United States are essentially an agricultural people. Yet how often has the singular spectacle of importing from Europe bread stuffs for our own citizens, been exhibited within the last few years. The tide has changed, and the current is setting now in an opposite direction. Cheese from New York has been sold in the Liverpool market in large quantities recently. During the last week, over one thousand kegs of lard were taken up in this city for exportation. The amount of flour constantly going abroad is very large. It assists to pay off our indebtedness to Europe for the millions of luxuries we import.

Philadelphia North American.

SHEEP-KILLING DOGS.

A young dog having wantonly bitten and mangled a large lamb, so that it died, was muzzled by one of my servants, tied to the dead lamb, for a day and a night, and severely beaten He was entirely cured of his propensity for chasing sheep, and would never afterwards approach them.—*Judge Peters.*

AGENCY.

THOMAS P. SEGAR is not authorised to receive subscriptions for the second volume of this work. Mr. Segar's authority is dated in July, 1841, and ceased with the year. Notwithstanding Mr. Segar, in many instances, failed to pay over subscriptions, or even report the names of subscribers, that he obtained during the last year, at his most earnest entreaty, we forbore to expose him, by publicly revoking the authority he held, especially, as in a letter written in December, he expressly declared, that, after what had passed, he would not *presume* to take subscribers for another year.

If, however, we choose to indulge our good nature to an unreasonable extent, it should be at our own expense, and not that of the public. We feel, therefore, morally bound by any payment made Mr. Segar before the circulation of this notice. We hope that any gentleman, who has Mr. Segar's receipt, and has not received the paper, will inform us of the fact, and feel assured, that the failure is attributable to our ignorance of his being a subscriber.

Our agents are required to report, at least, once a fortnight, and we will be obliged to any gentleman, who does not receive his paper within that time, after subscribing, to inform us of the fact. All our good nature has been absorbed by Mr. Segar, although he is the only agent of whom we have ever had cause to complain.

NOTICES.

For the many complimentary notices which the commencement of our second volume has attracted from the political press, in Virginia especially, we have no return to make except the homage of our heartfelt thanks. We never regret the narrow limits to which our space confines us so much, as when it constrains us to such a poor return for such favors.

RECEIPTS.

We are very often asked for receipts, and we have a great many letters to write for the purpose of enclosing them. Hereafter, the direction of any number of the paper (except the first) to any individual, will be a receipt in full for the year's subscription. We say, except the first, because, that is frequently sent as a specimen.

BACK NUMBERS.

We have at length completed the tedious job of our re-print, and are now busily engaged in mailing the back numbers to those to whom they are due. If any gentleman, entitled to get them, should fail to receive them in the course of the next ten days, he will please inform us of the failure, when the mistake shall be immediately corrected.

Richmond Markets, February 17, 1842.

BUTTER—Mountain butter, wholesale 12½ a 16 cents for firkin; 20 cents for roll.

COTTON—8 a 9 cents per lb.

COTTON YARNS—Richmond and Manchester, (factory prices,) Nos. 4, 5 and 6, 20c.; 7, 8 and 9, 21c.; 10, 11 and 12, 22c.; 13 and 14, 23c.; 15 and 16, 24c.; 17, 25c.; 18, 26c.; 19, 28; and 20, 28 cents.

CATTLE—For cattle on the hoof, from $4 to $5 50, are the general prices. Mutton—There is great variation in the quality; indifferent sheep bring only from $1 to $2, while the finer qualities bring from that to $5 per head.

CHEESE—8½ a 9 cents per lb. very scarce.

FEATHERS—38 a 40 cents per lb. for live geese.

FISH—Mackerel, No. 3, $7. Herrings—No. 1, North Carolina, $3 50; No. 2, $3; Potomac cut, $3 25. Shad, $8 50 per barrel.

FLOUR—Demand limited; sales at $5 87½ on the bank.

GRAIN—Wheat $1 15 a $1 20, are the prices now paid for good red and white. Corn, 55 to 60 cents per bushel. Oats, from wagons and depot 50 cents. Very little grain coming into market.

IRON—Pig, $25 to $35; Swedes, $100 per ton. English, $85 to $90; Tredegar, (Richmond manufactory,) $90; Up Country bar, $75 a $80 per ton.

MEAL—65 to 70 cents per bushel.

PROVISIONS—Bacon—Old Smithfield dull at 6 cents; new city cured, 7½ a 8 cents, demand small; old Western sides, 3 a 5 cents, as to quality; shoulders, 2 a 4 cts.; demand for old sides fair. Lard, 7 a 8 cents, retail demand only.

PLASTER—Last sales at $3 50 at Rocketts.

STEEL—American blistered $135 to $140 per ton.

TOBACCO—No change in prices to notice.—Breaks are increasing in quantity—but little improvement, if any, in quality. We continue our quotations: Lugs $2 25 a $2 50 and $2 75; Leaf $2 75 a $6 25, extreme rates—general sales of Leaf at the inspections from $3 a $4; a great portion of common Leaf sells at from $3 a $3 25.

FREIGHTS.

NEW YORK—Flour, per bbl. 25 cts.—very little going. Coal, 8 a 8½ cents per bushel. Tobacco, $2 50 per hhd.; boxes 20 cts.; kegs 25 cents.

PHILADELPHIA—Flour, none going. Tobacco, $2 50 per hhd.; 20 cts. for boxes; 25 cts. for kegs, none going. Coal, 7 cents per bushel, Richmond measure.

ON THE CANAL—To Lynchburg and intermediate places, 10 cents per 100 lbs.

EXCHANGE.

FOREIGN—On London 16 a 17 per cent. prem.

DOMESTIC—New York Checks, 8½ premium.
Philadelphia, ¾ a 1 premium.
Baltimore, 5 premium.
North Carolina Bank Notes, par.
South Carolina, 5 premium.
Savannah, 2 premium.
Augusta, 2 premium.
Alabama, 10 discount.
Tennessee, 10 discount.
Specie, 6 a 6½ premium.

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THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.*

Tillage and Pasturage are the two breasts of the State. *Sully.*

C. T. BOTTS, Editor, MAIN STREET.

Vol. II. RICHMOND, MARCH, 1842. No. 3.

For the Southern Planter.

AN ESSAY ON THE BEST METHOD OF CULTIVATING ROOTS.

[Continued from p. 27.]

The next thing to be considered, is the most safe and economical mode of taking care of these crops. And here I acknowledge myself indebted to one of my agricultural papers for a method, by which much time and labor are saved. Instead of the slow and tedious mode of pulling up the roots by hand, of throwing them into heaps, and of cutting off the tops with a knife, one hand passes along the rows of beets and turnips, and with a small garden hoe made quite sharp, with a single stroke, cuts off the top. Another hand follows on, and with a similar instrument, except that it has prongs instead of a hoe, pulls up the roots, drawing two rows into one. A third then comes along with a cart, and collects them. The tops are then raked into heaps with great rapidity, and disposed of as you think proper. In storing away the roots, I have found the following a safe and expeditious mode. At some place convenient to the farm pen and other feeding places, the surface of the ground is scraped off to the depth of about 6 inches, and to the extent of about 5 feet in diameter. This foundation is amply sufficient for one cart load of roots, which is about the proper quantity for one place. The cart, on arriving with its load, is tipped up, so as to discharge the whole contents into this place—the roots are then rounded up in the shape of a cone, and the whole well covered with dry litter and dirt. During the first week or ten days, a small hole should be left at the top for the escape of heat and moisture; after which the whole may be permanently closed up, and the process is finished. In this manner, I have known roots to keep in a moist plump state with all their juices, till the beginning of May. But the beets being more tender ought to be used first.

The last thing to be considered, is the peculiar root, that experience shows, is best adapted to our climate and soil. Of roots cultivated for stock, and it is only in reference to them that this treatise is concerned—those in most general use, are the potato, the beet, the carrot, the parsnip and the turnip. Of the potato, we have two general varieties, the sweet and the Irish. The former, I have frequently attempted to raise, but have so uniformly failed, that I cannot trust myself with any account of its cultivation. My old and respected friend John Carter, has had great success in this article, particularly in taking care of it, and I hope he will lay aside all diffidence, and yield to the general wish of giving to the public, his mode of managing it. I am now (15th of January,) regaling myself and my family, on potatoes raised and taken care of by Mr. Carter, as sound and as well flavored as they were the day he took them from the ground.

The Irish potato is known to us under a great many varieties; nor does there seem to be any end to their multiplication. It is not my purpose to enquire, which of the numerous species it would be most profitable to cultivate. The Rohan was for some time, considered as the most productive, and therefore most desirable for stock purposes. But this variety seems now to be superseded by several others. I would rather enquire, if the cultivation of this root as a food for stock, is to be regarded (all things considered,) as an act of sound economy. And for a correct conclusion on this subject, we ought not to go to New England, nor to the British provinces, nor even to any of the middle States. *There* in a moister climate, this crop succeeds to an amount, and with a degree of certainty, which is altogether unknown among us. In our hot and dry climate, I must say, that I have found this a very precarious crop, insomuch that I have failed, either in whole or in part, one year in three. In a few instances, I have not gathered as many as I planted—in others, the product, has been a liberal one. It is then a question of grave import, if sound economy warrants the cultivation of this root to any great extent. Indeed I rather think, we ought to direct our efforts to other crops, relative to which there is not the same uncertainty. It may however be said in favor of this crop, that it is of easy culture. Most of the work, both in the preparation of the land, and in the subsequent cultivation, may be performed with the plow; and when the situation chosen is rich and moist, there is comparatively little risk of a failure.

As to the parsnip, there is but one variety now in general use. Sometime ago, there was another variety, called the Guernsey or Jersey cultivated mostly in Pennsylvania and Ohio, sai

to have been considerably larger, and of equally fine flavor with that in common use. It is now however so mixed with the common parsnip, as to have lost its distinctive character. This is certainly a most valuable root, abounding in saccharine and other nutricious matters, which make it a most important article of food. Indeed it appears to contain more of the solid, and less of the watery particles, than any other root. In this respect, it approaches nearer to the solidity of grain, than any of its family. It succeeds well also, even when planted in narrow rows, so that its product, from a given quantity of land is generally very great. But there is this great objection to it—that it requires a long time, from early spring till hard frosts, to come to maturity; and during this whole time, the cultivation is a tedious and slow process. When planted at a distance to secure a large crop, the hoe and the spade can alone be used among it, and this detracts, in my view, very much from the value of the crop. If however, there be a sufficient force to carry on the other more important operations of the farm, the cultivator of this root, will commonly find himself amply compensated for his time and trouble.

Of carrots, there are two varieties—the orange and the white. The former is the finer sort, and is generally cultivated for the table. The white is much larger, but of a coarser texture. Which of these varieties is in fact most valuable for stock, I have not had the means of determining, but it is a fact, that with the extensive cultivator, the white has almost entirely superseded the orange. This however may be accounted for on the score, that much less labor is necessary in cultivating the larger than the smaller. The product also, is considerably greater. The carrot by all those who have used it, is spoken of in the highest terms. They represent it as peculiarly fine for the milch cow, asserting that it not only greatly increases the quantity of milk, but that it imparts to it a rich color, and delicious flavor. But with the parsnip, it is also a tedious and troublesome crop, and except in peculiar circumstances I doubt its economy.—These crops are not only a long time on hand, and the cultivation tedious, but after they have come to maturity, the ordinary mode of harvesting is attended with great trouble and loss of time. I have however seen it recommended to pass the plough along one side of the row, throwing the dirt away from the roots, and leaving them bare; which certainly very much expedites the process of collection.

Of beets, besides the finer sorts which are cultivated for the table, there are two varieties which are of great value as food for stock. These are the mangel wurtzel and the white Silesian, commonly called the French sugar beet. Of these varieties, the latter, under the same circumstances, certainly attain the greatest size and weight, and in addition to this, is found upon analysis, to contain the greatest amount of saccharine and other nutricious matters. If this be the case, the thing is at once determined as to which it is most expedient to cultivate. In France, Belgium, Austria and the German Union, the sugar beet is cultivated to a very great extent, so that in these several countries, they actually manufacture sugar to the amount of 170,000,000 lbs; and after the sugar has been extracted from it, the residuum is still found of great value for their stock. If then the beet, after being deprived of one of its most nutricious properties, is still important in this way, how much more important, with all its properties entire? Besides, experience warrants me in saying that the foliage is of great value as a green food both for hogs and milch cows. They devour the leaves with great avidity, and their value is much enhanced from the fact, that they come in when clover and other green food begins to fail. Nor does the removal of the lower leaves injure the plant in the least, for if left on they always perish and drop off. The beet therefore, whether we regard it for its great product, its nutricious properties, the facility with which it is cultivated, and the almost certainty of the crop when properly managed, is to be considered as one of our most important acquisitions.

But there is another root, which in a treatise of this kind ought to have a prominent place; and that is the turnip. And here I shall at once pass by all the varieties of the white turnip, which although very desirable for other domestic purposes, I do not think of much value for stock. But there is another variety of this root, much more solid, and according to analysis, much more nutricious, which no stock-breeder ought to neglect, and that is the Swedish turnip, commonly called the Ruta Baga. There is no doubt that the celebrated William Cobbett, Esq., was the first to introduce this valuable root into our country, nor have I seen any treatise on its cultivation, which in fullness and accuracy of detail, together with an inimitable charm of style, is to be compared with his. This root may be largely and successfully raised in our climate, and that too with an economy which does not apply to any other; for whilst all the other roots require the whole season to come to maturity, this requires but half. A crop of clover or even of small grain, may be taken from a piece of ground, and then that same piece be got ready in sufficient time for a crop of turnips. Great care however, as has already been intimated, is indispensably necessary in the preparation of the land. Indeed, in this country, we have as yet to learn a most important lesson on this subject. In England, this branch of husbandry is carried to an extent, which is altogether unknown among us. *Here* the whole process is too frequently a careless and slovenly affair. We often aim at

more than our indolent habits will allow us to perform, and the consequence is, an entire, or at least, a partial failure. The turnip however must form an exception to this bad rule. The ground being well prepared, well manured, and well pulverised, and the proper season having arrived, we may venture to sow the seeds, and if the after culture be conducted as directed above, we may, with the blessing of Providence, calculate on a bountiful crop.

For the Southern Planter.

CULTURE OF INDIAN CORN.

In the last number of the Southern Planter there is a call from N. T. Green for information on the culture of Indian corn, and although I doubt not but that some other more capable and experienced corn planter will undertake to answer the young farmer's queries, yet I too,cheerfully assume the task, hoping that all I shall say may not be in vain, or impertinent.

In time past, I followed Col. Taylor's plan of bedding or ribbing all my corn land, but now I bed only such as is nearly level and tenacious of water. But instead of making those beds only five and a half feet wide, as directed by Col. Taylor, I now make them five and a half *yards*, putting three corn rows in a bed. Formerly I spread my manures, either short or long, immediately before the fallow plough, but now I spread my short and fermented manures on my gardens and meadows, and my long manures on the land intended for corn the following year; that is, I am now spreading straw, &c. and shall shortly cart out and spread the contents of my cattle yard, and sow plaster, on the land intended for corn in 1843. Instead of my land intended for corn being hereafter potched and botched by the treading of teams, wheels, drivers, and spreaders, it is expected in future to be rich, mellow, and neat, at the times of fallowing and planting; and harvested accordingly. My theory and general practice is to fallow deep both rich and poor land, but if I were forced to reap the greatest immediate return from my poor grounds, I would use the subsoil plough, or coulter, thereby breaking the subsoil, yet retaining the soil on the surface. Much however will depend on the depth of soil, the nature of the under stratum, and the crop intended to follow the corn, a treatise on which would fill my sheet; consequently I must forbear.

The proper season for ploughing corn ground is from November till April; first, the turfy or soddy lands—second, the naked clays—third, such others as are infested with insects—and lastly, unimproved sands, &c. Land which has been ploughed with a tough sod, should be broken down with a harrow twice before planting; once in February, and again when all corn ground should be harrowed, to wit, immediately before planting. Of late years I do not plant corn until the woods are fairly leafed, say between the first and tenth of May; when my industrious neighbors are all done, and laughing at my apparent sloth. But as a little advantage in the start of a race of five months, is nothing when compared to a clean track and a pampered "nag"—so I prefer to put both land and seed in good condition before I plant.

When the time for planting has arrived, and the seed corn is ready, the break harrow starts, for the triple purpose of leveling, pulverizing, and destroying the quickness of weeds and grasses. The shovel plough follows to open furrows, and immediately dropping and covering, closes the job. The seed having been sprouted before planting, it is up the third or fourth day, and having taken a vigorous start before the weeds, it is disposed to choke them down through life. I have tried several different kinds of stimulative steeps for corn, and have finally concluded that the undermentioned is best. About eight or ten days before planting, fill a barrel about half full of hot water, then cast therein alternately three measures of tobacco and one of meal of some kind of grain, until certain of a sufficient quantity to create a strong and glutinous liquor, after fermentation; after which, fill the barrel with more hot water and cover it. This fermented liquor will have the scent and much of the consistency of honey, and will not only invigorate the germ, but hold on to a quantity of plaster for the same purpose. About forty-eight hours before planting, I put into a tub as much seed as may be sufficient for one day's planting, and saturate it with the liquor; and as needed, it is lifted out and as much plaster added as will adhere; and so for future operations. Twenty or thirty gallons of liquor may suffice for seeding forty or sixty acres of land; as what remains after soaking can be returned to the fermenting barrel.

I have tried both drill and cross planting, but finally adopted drilling, supposing that my land would yield thus a much better crop.

I have also tried various width for rows, and distances on the row, with one, two, and three plants together; and have finally concluded that for my climate, land and kind of corn (which is a large stalk and ear) rows five and a half feet apart, with about 8,600 plants to the acre, suits me best. For the purpose of better smothering pests, it would no doubt be better to have single stalks, which at 8,600 to the acre, would make them one foot apart, but my general practiee is to plant at two feet, leaving two, and on very rich spots, three stalks together.

On ground lying pretty well, and not incumbered with stones or stumps, I cover my corn with a very light harrow—otherwise with the

hand hoe: and on like ground the crop is worked with the cultivator, otherwise with the Dutch shovel, or coulter. The number of workings which I give my corn, is from four to six, and oftener would be serviceable, provided not too late so as to prolong the growth to be in danger of frost. I never hill my corn, either with plough or hoe, and would thank no man to do it for me; indeed, the hand hoe is only used once, and sometimes not at all; and that once is when the corn is small, merely to brush off the few weeds which may be growing on the row. The tillage stops about the 15th of July, when the ground is so shaded that nothing can grow beneath. When corn is planted as thick as it should be, it is useless to plant amongst it either pumpkins, cimblins, or peas, for they cannot yield fruit.

I am a grower of tobacco, consequently do not sell corn; indeed, being a pork seller, I have sometimes to buy a little grain; but I am presumptuous enough to believe that no man in the Commonwealth does produce larger crops of corn than I do, on land of the same quality. My average to the acre, for the last two years, would be about 45 bushels, and that on land which a few years past was considered worthless by many. But I fear that my cornfield of this year will not tell more than half of this number, for it is of but ordinary quality and gets no manure.

My cultivators are made with three hoes put in a frame, so that they can be placed at required distances; the hoes being about as wide as the four fingers, and shaped like that called the bull's tongue. With this implement, every growing vegetable can be cut to death, by three passes at a row; and both horse and ploughman work with more ease than with a plough. It may be necessary to say to the inexperienced corn planter, that weeds and grass must be slain very quickly after they peep from the earth, otherwise the plough must be used. There is much in the kind of corn, but more in its culture, and most in the land.

Query—What advantage can there be in cultivating the double eared corn?

ZA. DRUMMOND.

Amherst, Feb. 12, 1842.

COVERING.

We have received a communication from "A Hanoverian," in defence of his former position, that litter should pass through the farm yard rather than be put on the land for the benefit of the "cover." He maintains that the testimony of W. W. proves nothing, as it does not appear whether he was formerly in the habit of top dressing or ploughing in the manure. He admits, such are the advantages of top dressing, that the undecomposed litter, applied to the surface, might have made the crop of W. W. much better than he had ever obtained by ploughing in the decomposed matter; but he maintains, that a top dressing with the decomposed litter would have been better than either. He says that many farmers make more wheat straw than they can pass through their stable yard, and that they universally regret being compelled to carry out their straw without the benefit of the farm yard process. He infers that, if the value, attributed to covering by W. W. had existed in reality, such farmers must long ago have discovered it.

Nottoway, Va. Feb. 18, 1842.

To the Editor of the Southern Planter.

Dear Sir,—I hope that some of your correspondents, in contributing their valuable information to your pamphlet, will please be so good as to answer the queries herein stated. In giving them a place in your pamphlet, you will much oblige

Yours, most respectfully, A SUBSCRIBER.

Question 1. Can the farmers in this part of the couutry afford to make tobacco for less than $5 per hundred?

Q. 2. Is it not more than probable that the price of tobacco will always hereafter be less than $5, taking all things into consideration?

Q. 3. Will not this State (Va.) be compelled to discontinue the practice of making tobacco, in a few years, and what can be its substitute to those living from 30 to 50 miles from market?

Q. 4. As the wheat crop is so very uncertain, and no tobacco to be made, under good management, how is farming to be rendered profitable in this part of the State?

BONE DUST.

An agriculturist, rendered attentive to the vast importance of bones for manure, instituted privately some comparative experiments; the results of which prove, that bone dust acts in the cultivation of ground, as compared to the best stable manure, 1st. In respect to the quality of the grain, as 7 to 5. 2d. In respect to quantity of grain, as 5 to 4. 3d. In respect to the durability of the energy of soils, as 3 to 2. It produces several collateral advantages. 1st. It destroys weeds. 2d. It diminishes the necessity of fallow-crops. 3d. This concentrated manure, or substitute for manure, is more

easy of conveyance, less laborious to spread, and can with facility be applied to the steepest lands, in very hilly countries, or in wet meadow lands. 4th. It renders agriculture practicable without cattle breeding, grazing, &c.

Mark Lane Express.

From the Farmers' Cabinet.

COOKING FOOD FOR STOCK.

At length a due regard to the importance of cooking food for stock seems to be awakening up amongst us, and many are the inquiries for the best mode of conducting the process—whether by steaming or boiling—as also for the best and most convenient and economical apparatus for the purpose. Steaming has generally obtained the preference in the estimation of those who have been cogitating on the subject, but I am inclined to believe that, when it becomes generally practised, boiling will be preferred, and chiefly for these reasons:—first, all articles may be properly and easily cooked by boiling, but not by steaming—witness cabbage, meal, and the flesh of animals, that might often be devoted as food for hogs, under circumstances that would not warrant its use for man. And, second, the water in which these and all other articles are boiled will be found to contain a very large portion of their essence: consequently, it ought to be retained for use; the opinion that the water in which potatoes have been boiled is deleterious, being without foundation. And in this a quantity of meal should always be boiled for the whole of the time the operation is going on, when, at the end, the *soup* will be of greater importance, as an article of food, than any steaming could be made to produce— the dead carcass of a sheep, for instance, with a dozen large heads of cabbage cut fine, and a bushel or two of corn and cob meal stewed together in a couple of hogsheads of water, until the whole forms an amalgam—what could constitute a more luscious repast to fatting hogs? and in a proper apparatus the cooking could be performed slowly and effectually for a very trifling cost of fuel. Then, again, the cooking of corn-stalks—how much better could this be done by boiling, when a small quantity of corn and cob meal might be added, and a thick soup prepared that, with a small quantity of cut hay mixed, would form altogether the most palatable food either for cows or horses. There appears to me no question which would be the *best mode* of preparing cut food, while those who advocate steaming seem to have been biassed by the consideration that it is a *quicker* mode of proceeding. Mr. Editor, all our proceedings are marked by a *hurry* that would almost deserve the name of recklessness—we cannot be content to do a thing well, it must be done quickly and cheaply, and often indeed without regard to any other consideration. It is granted that steaming may be made a quicker process, but by properly constructed boilers working in pairs, according to a plan that has been proposed. a sufficient quantity of food for a very large stock of cattle and hogs could be prepared by a lad of fifteen, the cost of labor being more than repaid even by the superior quality of the manure produced—a consideration which some of our friends might designate as a trading in trifles—well, be it so; I am sure that the manure prepared by such a process would be found very essential to the raising of heavy crops.

I find that Mott's portable cast-iron furnaces are getting much into vogue for this purpose; they are very convenient and economical, but it is objected their egg-shaped bottom robs the boiler of its capacity, and is not the best form to economize fuel. The patent consists in enclosing a common iron boiler in a cast-iron jacket, by which the heat is *given out*, and not *retained*, as is the case when boilers are set in brick-work; iron being a conductor of heat—brick a non-conductor. If, therefore, any one having a boiler were to surround it with a sheet of thin boiler-iron bent into circular form and riveted, leaving a space between it and the boiler about two inches wide, for the heat and smoke to pass, and build up his bricks against it, he would find a great saving of time as well as fuel to arise from the alteration. At all events, the cooking of food for stock, by some mode or other, ought to be adopted, by which an additional profit could be obtained without an additional outlay of capital—an important consideration.

JOSIAH KENT.

The plan proposed for boilers, to which Mr. Kent refers, we presume to be the one afterwards described in the same work as the invention of Mr. James Pedder, the Editor of the Cabinet. This invention is novel and possesses several advantages over any other we have ever seen. There are one or two things that strike us as difficulties in the way of its operation, but relying upon the sound practical sense of the inventor to remove our difficulties, we shall give a cut and description of his boiler in our next. If the work he edits is to be taken as a test of his ability, we do not hesitate to pronounce Mr. Pedder one of the soundest and most practical agriculturists in the union.

TRAMPLING.

We stated, some time since, that a distinguished agriculturist esteemed very highly the mechanical effect of trampling on a light soil.

Upon mentioning the circumstance to a James River farmer, he stated, that he had noticed, that a portion of his field that had long been a lane for the use of cattle, since it was put in cultivation, continued still apparent from the superior luxuriance of its vegetable growth; and we find that a correspondent of the Farmers Cabinet mentions as a fact in favor of the pasturing over the soiling system, that he had heard, that clover fields, not pastured in the fall, invariably suffer from the frost, especially in open winters; in one instance, the difference was said to be equal to 100 per cent. in favor of the succeeding crop of a pastured lot over an adjoining one that was soiled.

From the Farmer and Gardner.

SOIL AND LOCATION FOR PLANTING TREES.

I apprehend that many persons who purchase trees, are not acquainted with the soil and location, naturally the best adapted to each particular species of trees or shrubs, and sometimes, it has happened that for want of this knowledge, trees that I have carefully cultivated for years, on being ordered, which were carefully dug and packed, have died because not planted in a soil, suited to their nature.

I therefore propose to state what in my humble opinion, would be useful to some of my customers on the above subject.

To enable us to form a correct judgment on such subjects, we ought to study nature's works; some sorts of trees (but it is the fewest number) thrive best on a stiff white clay, many others on upland, mellow loam, and other trees and shrubs will hardly grow at all, unless on wet or moist land, and some grow best on sandy land.

An hour's ride through our woods, by a person of common observation, will at once convince him of the way nature works; the White Oak abounds in stiff white clay, the Walnut, Poplar, Hickory, Dogwood and Yellow Locust are found flourishing on the upland mellow loam—but on all wet ground or damp situations, we find the Maple, Magnolia, Willow, Black Alder, Burch, Winterberry, &c., not because those trees are planted where they are found, the winged seed of some of them are carried by the wind a long distance, but they will not grow unless they light on the sort of soil congenial to their growth, which to me is very instructive, showing the necessity of planting each sort of tree on ground suited to its nature as near as we can; however, there are very many species of trees not so particular, but ground may be improved to suit them. The greatest number of trees grow best on a deep, open, free mellow loam, which is the best for most of fruit trees—our climate is rather warm for the Pear and Gooseberry. To obviate the blight of the first and the smut of the last, select the coolest soil and exposure made rich, particularly for the last—and it has been highly recommended, and I think with good reason, to cover the ground around these trees and shrubs to protect them from the summer's drought and heat, with stone, rotten wood or board.

The European Cherry does best on high granite land, but not so well on lime stone or low bottom land. The Peach will thrive on all sorts of land (except a stiff white clay, or swamp,) if high and wavey, but delights in a rich sandy loam. But plant the Willow, Maple, Magnolia, and such trees in damp situations, or where the rain or other water can be led to their roots occasionally.

ROBERT SINCLAIR, Sen.

TO PREPARE VEGETABLE MOLD QUICKLY.

As early in November as the leaves of trees can be collected, let them be brought in a considerable quantity, into a close place, and dressed up there in the form of a hot bed. Let this be well saturated with the drainings from the dung-heap, with suds from the wash-house, and with urine from the stable and cow-house, where this latter article can be procured. Let this bed or heap be covered and lined with fresh stable dung to make it heat. When the heat is sufficiently subsided, let the leaves be uncovered and turned over, to mix the dry and wet well together, and if moisture be required, let them have it of the same description, repeating the process till all be reduced to fine mold. This will be ready for use in two months from the time of collecting the leaves, and to prevent any waste of the liquid recommended, a layer of maiden earth, two feet thick, should be made the substratum, which would receive any of the valuable liquid that would otherwise run to waste. Leaves of slow decomposition should be avoided, as those of the oak, &c. which, however, are the best for retaining heat in hot beds and pits. The leaves of Fir should also be avoided, but those of the Sycamore, Elm, Alder, Maple, and all the soft kinds are best suited for the purpose. This compost should be kept dry in an airy place, and ridged up, so that the rain cannot wash out the salts with which it abounds.—*Doyle's Practical Gardening.*

SOAP SUDS.

The Horticultural Society of Massachusetts have bestowed a premium of one hundred dollars on Mr. Haggerston, for the discovery, that a solution of soap, made from whale oil, is de-

structive of the bug that infests the rose, commonly called the rose bug. As we do not know the principle upon which it acts, we cannot say whether the *whale* oil is a necessary ingredient, or whether the application, which is made with a common syringe, would be equally effectual as to bugs of other kinds. The experiment is worth making.

BROWN CORN.

This is a variety much talked about in the Northern papers, and we had intended to have gotten some of it for experiment, but a writer in the S. C. Agriculturist says, that he has given it a fair trial and pronounces it worthless at least in the Southern climate.

AGRICULTURAL ADDRESS.

We have been favored with a copy of an agricultural address, delivered by Gen. Steinberger, President of the Agricultural Society of Mason, Cabell and Kanawha. We make an extract confirmatory of the opinion heretofore expressed by the General, that the proper application of manure is to a grass sod. He says:

"I expressed my sentiments so fully in my last communication on the growth and culture of the corn crop, that I will now say but little on that subject. I yet entertain the opinion that the best preparation that we can give to land, to produce the greatest yield, should be applied when it is in a grass sod, and previous to turning it over. Whatever efforts are then made to manure and enrich the soil, the benefits resulting therefrom will be immediate and direct. I consider that deep ploughing at the same time is essential, and almost of equal importance to secure a successful crop. In no other way can we guard more effectually against the withering influence of our dry seasons, than by thus creating a depth of mellow soil, which repels its effects by lessening evaporation."

We have more than once expressed our opinion of this mode of applying manure. We would never put out an ounce of it, except upon a growing sod of grass or clover. That portion, that is soluble and sinks, will be apprehended by the roots; whilst the leaves will feed upon the gaseous constituents. It has been urged that unless the manure is covered, the volatile gasses rise and are lost, before they can be absorbed. But, even if these gasses are evolved faster than they are consumed, we should remember that several of them, the carbonic acid gas especially, are heavier than atmospheric air, and do not rise at all. Another great advantage of this system is, that, by proper management, a sod may be always kept ready for the reception of the manure, so that the heavy business of hauling may be done at leisure, instead of being forced upon the farmer, probably, at his busiest season.

COFFEE.

A French gentleman of distinction has called upon us to say, that the directions for making coffee published in our last, are "all right" with one exception. The milk should never be boiled, but heated by placing the vessel in which it is contained in another of boiling water.

BONNETS.

A new article of American manufacture, called the *Amazon Bonnet*, was produced at an exhibition in New York. It is manufactured of Manilla grass, 6500 fibres of which are required for a bonnet of the finest class. This bonnet, the committee say, can be taken apart and washed or cleansed, and put together again, losing thereby none of its original beauty or value.

The committee speak of the article in high terms, and say that they have the authority of ladies, with whom they consulted, for the expression of such an opinion. They make an appeal to the patriotism of our country women to prefer this article of domestic production to any of foreign importation.

If the article is strong, durable, and economical, we will guarantee it never becomes *fashionable;* and in a contest between patriotism and fashion, we believe the result may be predicted with considerable certainty.

WOBURNS AND BERKSHIRES.

A very spirited contest is going on in the west with respect to the relative value of these two breeds of hogs. Mr. William C. Hazen, from Tennessee, writes the editor of the Cultivator, that having both, with several other varieties, he greatly prefers the Woburns. The

claims of the Berkshires, on the other hand, are advocated by others as very far superior to those of any other breed in existence.

We imagine the difference in opinion arises, mainly from the difference in different individuals of the same stock. We have seen some Berkshires certainly superior to any other hogs we ever saw; but we have seen others, of perhaps the same litter, of very indifferent form, and in no manner superior to thousands without a name or pedigree. Both of these animals are sold as *Berkshires;* the purchaser of the one is delighted, and praises the stock beyond all bounds; the owner of the other is disappointed, and declares the stock to be little better than a humbug. We have no doubt there are some Woburns better than some Berkshires, and some Berkshires very far superior to some Woburns.

STABLE FLOORS.

We see that some contrariety of opinion exists as to the relative advantages of plank and dirt floors for stables. There is a coolness about the dirt that is generally acceptable to the feverish hoofs of a tired horse, and we believe that a horse's legs will swell less on a dirt than a plank floor. On the other hand, it is urged, that the urine, the valuable qualities of which are undoubted, is absorbed by a dirt floor, which may be conducted into a trough by a wooden one, and so saved. It is said, too, that the ammoniacal fumes, arising from the dung and urine that frequently become incorporated with the earth, where there are no planks, are injurious to the eyes and health of the horse. If planks are used, the floor should be perfectly tight, so as to prevent any of the liquid from running through, and they should also have a little, but not too much, fall, say a half inch to the foot, from the manger to the door. Whether plank or dirt is used, the stall should always be well littered, and the fresh dung regularly removed.

GALDS.

Mr. Jones, who kindly furnished an article for the last number of the Planter, under the head of manures, remarks upon the subject of sterile spots, technically and expressively called *galds:*

"We must cure them somehow—I have tried many ways. I have ploughed in leaves and straw, after having let them be as a "cover" for a long time, with but little amendment. But I have succeeded completely by hauling the soil from such places as I could spare it from, fence ways, turning rows, &c. depositing it upon the galled spot, thereby giving it a new surface. This I found a heavy business, but it is better than letting them remain an unprofitable eye sore.

"A cheaper way, and perhaps for the present at least, better, is to level the surface, (if gullied) cover with ashes, and harrow or cultivate in the wheat or oats, or even a very shallow furrow will not hurt. This plan I like best, and accordingly save carefully all my ashes for this very purpose. The application repeated some few times will cure the worst gald, or if enough were given it would do it at once. There must be an application of something to change the nature of the earth, and give tenacity to it.—This, ashes, either leached or unleached, effectually does.

MAKING SOAP.

To the Editor of the Ploughman:

Sir,—Will you publish a receipt for making soap? It is in this place, too much a matter of *luck*, and very *bad luck* too, the greater part of the time. and if there is a *rule* it will be very acceptable, I have no doubt, to many of your subscribers.

Yours, respectfully,

CHARLES W. MACOMBER.

East Marshfield, Dec. 24, 1841.

The following is as good a recipe as we could write. There is no kind of difficulty in making soap if the *lie* is good.

It is sometimes economical to use weaker soap; if this is desired, the best way is to make the soap strong at first, and dilute it afterwards at pleasure by the addition of water.—*Editor.*

SOAP.

In the city, I believe, it is better to exchange ashes and grease for soap; but in the country, I am certain it is good economy to make one's own soap. If you burn wood, you can make your own lye; but the ashes of coal is not worth much. Bore small holes in the bottom of a barrel, place four bricks around, and fill the barrel with ashes. Wet the ashes well, but not enough to drop; let it soak thus three or four days, then pour a gallon of water in every hour or two, for a day or more, and let it drop into a pail or tub beneath. Keep it dripping till the color of the lye shows the strength is ex-

hausted. If your lye is not strong enough, you must fill your barrel with fresh ashes, and let the lye run through it. Some people take a barrel without any bottom, and lay sticks and straw across to prevent the ashes from falling through. To make a barrel of soap, it will require about five or six bushels of ashes, with at least four quarts of unslaked stone lime; if slaked, double the quantity.

When you have drawn off a part of the lye, put the lime (whether slaked or not) into two or three pails of boiling water, and add it to the ashes, and let it drain through.

It is the practice of some people, in making soap, to put the lime near the bottom of the ashes when they first set it up; but the lime becomes like mortar, and the lye does not run through so as to get the strength of it, which is very important in making soap, as it contracts the nitrous salts which collect in ashes, and prevents the soap from *coming*, (as the saying is.) Old ashes are very apt to be impregnated with it.

Three pounds of grease should be put into a pailful of lye. The great difficulty in making soap *come*, originates in want of judgment about the strength of the lye. One rule may be safely trusted—if your lye will bear up an egg, or a potato so that you can see a piece of the surface as big as ninepence, it is just strong enough.—If it sink below the top of the lye, it is too weak, and will never make soap; if it is buoyed up half way, the lye is too strong; and that is just as bad. A bit of quick-lime, thrown in while the lye and grease are boiling together, is of service. When the soap becomes thick and ropy, carry it down cellar in pails and empty it into a barrel.

Cold soap is less trouble, because it does not need to boil; the sun does the work of fire.—The lye must be prepared and tried in the usual way; the grease must be tried out, and strained from the scraps, Two pounds of grease (instead of three) must be used to a pailful; unless the weather is very sultry, the lye should be hot when put to the grease. It should stand in the sun, and be stirred every day. If it does not begin to look like soap in the course of five or six days, add a little hot lye to it; if this does not help it, try whether it be grease that it wants. Perhaps you will think cold soap wasteful, because the grease must be strained; but if the scraps are boiled thoroughly in strong lye, the grease will all float upon the surface, and nothing be lost.

HUMBUGS.

We extract the following from a chapter in the Temperance Advocate, on "Humbugs," because the author has expressed our own opinions in a very lively and sensible manner.

There is another department of agriculture which is now receiving valuable accessions, which is doomed, I fear, to prove a humbug, as it will be conducted.

I allude to the introduction of stock—Durham short horn—Devons, Ayrshire and Herefords—as well as the Berkshire aad Woburns. I do not wish to be understood as opposing the introduction of such stock—but I do condemn the outrageous puffing daily expended upon them. If they are valuable, they will soon propagate their own praises.

We must crawl before we can walk. We must be prepared for the raising of such stock, before we can do it successfully. First, we must learn to treat our native stock better. No cow or hog can be valuable, unless great pains are bestowed upon it. I can show many cows and hogs in the country, which have been well treated, that will equal many of the Durhams or Berkshires. I heard, not long since, a very intelligent lady say, that "she had seen no increase in the quantity and quality of the milk in her dairy, since her husband had introduced his Durham short horns."

I am satisfied they will prove a valuable cross on our cattle, if *properly attended to.*

But the thorough breed require great care, attention and high feeding. If they are allowed to "rough it," as our common cattle do, you will always set your piggin under a pile of bones. It is wrong then to say, they require no better treatment than common cattle—for by that means, you destroy the very aim and object of their introduction. Then I put down all those tales about 25, 30, 36, 40 quarts at a milking from cows, (with ordinary feeding) as humbug; and *that* man has cattle to sell or to show, or wishes to outbrag his neighbors; and I speak these things from experience and observation.

Now for the Berkshire and Woburn. The Berkshire is a perfect specimen of a hog, and if well fed and taken care of, will answer our purpose admirably.

But the very fact that they have been carefully bred and reared, is the strongest possible argument, that he will require the greater care to prevent his degeneration.

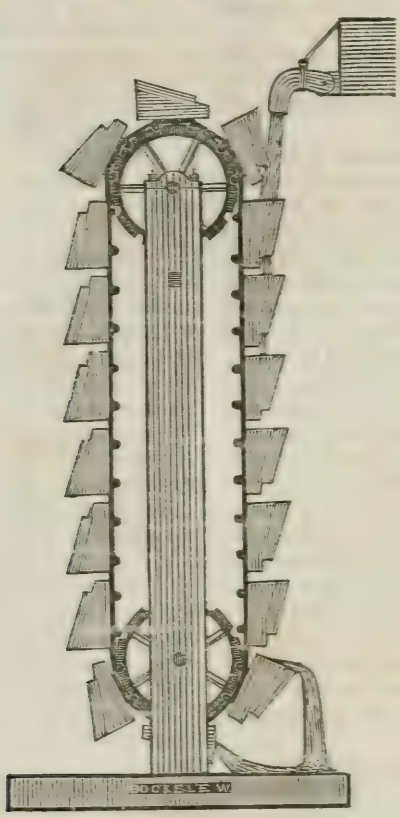
The Woburn will attain a greater size, but his meat is coarser, and he requires higher feeding. All these tales about pigs being hogs of 300 and 400 pounds at 9 months old, are much such stuff as dreams are made of, when they pretend it was done by ordinary feeding. I know a country hog, which weighed, at 10 months old, 320 pounds. He was a fine hog, and wa finely treated—fed on mush and milk from th e score.

But of Berkshire and Woburn, rest assured, whenever you turn them out, like our country hogs, to root pig or die, the second generation

will have to wear a weight to their tail to preserve an equilibrium.

The moral of this chapter is, then, that no man should have fine stock who has an empty corn crib. And before you buy, be sure you can afford to keep.

WATER POWER.



The engraving represents one of the hundred different modes of obtaining power from the gravity of water. It is not altogether new to us, although it has been patented lately by Mr. John Dutton. We saw the same *principle* adopted by a gentleman of this city twelve months ago, who abandoned it after making some experiments. Nevertheless, we think it highly probable that this arrangement may be adopted with considerable advantage under certain circumstances. Where there is a great fall, with a small stream, and a three or four horse power only is needed, we think it possible that this would be the best mode of obtaining it. Under ordinary circumstances, we believe a well constructed overshot to be the most simple and economical application of water power, that has ever been invented. Mr. Dutton's invention certainly retains the water longer, and applies the power more advantageously, than any other we have ever seen. The patentee claims that it is much cheaper than the common water wheel, and that, being lighter, the friction is less. As to its superior cheapness, without much data on which to found our calculations, we should doubt the fact, especially, if wear and tear are added to prime cost. For a small power, we believe buckets might be made sufficiently strong of light material, so as to render the friction of this less than of the common wheel.

In short, as we intimated in the outset, if we had a thin stream and great fall, we might be inclined to *experiment* with Mr. Dutton's invention. But with an ordinary fall and stream, we

should certainly stick to the old, well tried overshot.

Mr. Dutton thus sums up what he considers to be the advantages of his invention:

"1st. No fall of water can be too great to be improved by this vertical chain wheel, and the additional expense for one of 100 over that of 25 feet is very trifling. Secondly, however small the stream of water, there can be no waste, and in this way thousands of streams may be brought into use, which at present are considered of no value, and unworthy of notice.—Thirdly, the small compass which this machine occupies, the expensive wheelpits commonly required are reduced to a mere trifle, and where there is a sufficient run of water to supply the mill the season through, dams are useles; the water may be brought to the mill and carried away from it in aqueducts, so that the miller may locate his mill near his dwelling for his better convenience."

COMPOST.

The following communication was obtained by a friend for his private use, and with the consent of the author is given to the readers of the Planter. The reputation of the writer for good management induced the application for his mode of managing compost.

Dear Sir,—I have observed the following method of making compost, with great benefit. I select a spot near the stable, where rains cannot affect it, and as fast as my manure accumulates at the stable, I lay it down between stakes driven firmly in the ground, so as to enable the laborer to form the compost heap of regular dimensions, about eight feet wide and five feet high. Lay the long manure about twelve or eighteen inches thick, evenly, and regularly.—Then place upon this layer of manure leaves, undecayed weeds, and rich earth, taken from such spots as cannot be cultivated, i. e. from corners of fences, hedge rows, ditch banks, &c. &c. Upon this layer of earth, which should be about a foot thick, scatter slaked, but caustic, lime, one or two inches thick; this makes the earth highly calcareous. Upon this earth, comes again a layer of manure, and so alternating, until you get the bank so high as to make it inconvenient to go higher, taking care to keep the top always flat, and the sides as regular as possible. In lieu of earth, I frequently use decayed weeds, ashes, the sweepings of kitchens, &c.

By attending to this regularly for a time, you will find it easy to accumulate large quantities of compost, far superior for all purposes to any manure I ever used, except hog and sheep dung.

When cut down it looks like ashes, and the earth will be found to have absorbed the ammonia, and other gases evolved by the manure in the process of decomposition. So completely absorbent does the earth become, when made calcareous, that in the warmest and most moist seasons, you cannot discover by the smell the least escape of gas. The quantity of lime required is comparatively small, and this is certainly the most judicious mode of using that important agent in the operations of agriculture. It acts immediately, and for gardening purposes is far superior to manure in the form in which it is usually applied.

If the manure is that made in the ordinary way, in the corn growing country, from cattle bedded on corn stalks and common grasses, it would be best to add more lime to the heap, because corn stalks, having a covering of silex, will be found to resist decay for a long time.

By this process you always escape *fire fanging*, which so frequently destroys our manure. Never put the lime on the manure; if you do, it will render the decomposition too rapid, but by keeping earth always on *top*, you prevent all loss.

In haste, your friend, R. W. C.

BREAKING HORSES, &c.

Dear Sir—My secret for taming Vicious Horses is gentleness and patience, which removes fear and gives the animal confidence in man. Rubbing a horse in the face will cause him to present his head to you, and talking kindly to him will attract his attention. After having cleared the stable or paddock of every thing (dogs, chickens, &c.) that will tend in any way to frighten the horse, drive him as gently as possible into a corner and approach him by degrees, that he may see that there is no cause for alarm. You must now rub his face gently downwards (not across nor "against the grain" of the hair,) and when he becomes reconciled to that, as you will perceive by his eye and countenance, rub his neck and back, till you come to his tail, repeating the operation several times till he will permit you to handle his tail freely. You may now lead him out, and call upon him constantly, in a steady tone, "come along" (whispering the words, to some horses, is better than to speak loud,) and in about ten minutes or less, he will follow you about quite tame and gentle.

In breaking a horse to harness or saddle, you must be very gentle with him. For the former you may commence by throwing a rope over the back, and letting it hang loose on both sides, then lead him about, caressing him as above, until he becomes satisfied that they will not hurt him; then put on the harness, and pull gently on the traces—in a short time, by this kind of treatment, he will be prepared for work.

In breaking for the saddle, you may begin by showing him the blanket, rubbing him with it, and throwing it on his back; in a short time you may lay the saddle on, and after fondling him for a few minutes, you may fasten it and ride him with perfect safety. It is better for one person to stand by his head at first and keep him quiet; and then to lead him along until all danger is over. If he is dangerous, you may exercise him for some time, by leading him, and leaving him, as he becomes more and more gentle in working. You can then manage him with more safety. It is better to *work a horse* to make him very gentle; but if this cannot well be done, I would recommend the use of bit and harness, that he may learn to be governed by the bridle; be careful not to get his mouth sore. Put on at first a loose harness, and let it remain on for some time; if the harness is tight, it will make an unbroken horse sweat and faint. You may, in the case of a very vicious horse, side line him. In a little time he will pass a carriage without shying, and will not caper in gear or under the saddle.

If a horse lies down, and will not get up, drive a stake in the ground and fasten him down for ten or twelve hours, then loosen him, work him for about an hour, water and feed him, and he will "know better next time."

To prepare a horse for hunting, snap a few percussion caps about him—before and behind—by degrees increase the loudness of the report, and in half an hour you may fire a cannon near him.

A *vicious cow* may be cured by the same treatment.

To make a horse follow you.—You may make any man's horse follow you in ten minutes, or sometimes less; go to the horse, rub his face, jaw, and chin; leading him about, still saying to him, come along; a constant tone is necessary; by taking him away from persons and horses, repeat rubbing, leading, and stopping. Sometimes turn him round all ways, and keep his attention by saying, come along; put your arms round his neck, whispering in his ear, saying, come along. I suppose, in some horses, it is important to whisper to them, as it hides the secret, and gentles the horse; you may use any word you please, but be constant in your tone of voice. The same will cause all horses to follow. If a horse has an injury in the face, you had better put off taming him until it is well.

To prevent a horse or mule from breaking his halter.—First, strong halter him with one that will not draw, as that often makes the jaw sore; then fasten him to something which he cannot pull loose, and let him pull; indeed, make him pull until he is unwilling to pull any more. You then get on and ride him a mile or two, and tie him so again, and let him stand quiet. By repeating this for a while, in regular use, you may turn him loose any where, and he will be safe. By the use of a good halter, a horse may be turned loose in a priarie to feed all night, and cannot be "stompeaded," or run off by wild horses; hundreds have thus been lost. Those who have no halters may with ease blindfold a horse, and then he will not run.

To teach a horse to lay down.—First, with some soft handkerchief or cloth, tie up one fore leg; then with a stick tap him on the other, and say, "kneel," sometimes by rubbing him on the head, and patting him on the leg, you will induce him to lie down. It appears all horses are inclined to obey you, and will do so when you teach them that you will not hurt them. You will have to employ some time and attention, you had better take him by himself. Repeat the trial three or four times and you will be successful.

To accustom a horse to the use of a gun, umbrella, &c.—Commence by showing your friendship, by rubbing the horse's face with your hand; then snap and explode percussion caps with a pistol,—let the horse frequently smell the powder and smoke; then you will fire small reports, until you shall see fear removed; then overhead, and behind the horse, until all is free. If you have a very wild horse, place him in a stall, or small pen, so as to have him safe; then fire a gun all around him, and go often up to him, speak to him, and rub him in the face, and then fire a gun again until he is free from starting. To make a horse used to an umbrella, walk before him, raising it up and shutting it again; let him smell it, and rub it over his head; then get on him, gently raise it, and ride him along, until the fear is over. It is in all cases, better to take the horse to some new place away from home; for if you go to the place where he has been spoiled, you will find he is apt to prove unkinder there than elsewhere. Sometimes, horses will remember for five years, places and habits, both good and bad. You must rub your horse on both sides, for he may be gentle on one side, and not on the other.

How to manage a kicking horse.—First, make a stall, or pen, for your horse, in which he cannot turn round, and with slats, through which you can put your hand to rub him. Then commence by rubbing him in the face, and all over, two or three times,—raising his tail gently, three or four times; then touch one of his forelegs, and say to him, "foot," "foot," until he shows willingness to raise his foot; raise the foot up, and put it down some three or four times; then go all round, until all fear is removed. All you wish a horse to do, ought to be done three or four times, repeated two or three days in succession.

How to manage a cow.—Tie her to some place, so that you can rub her all over; then salt her from your hand; feed her from your hand,

on half feed, and in three days you may do as you please with her. Rub her near the root of the tail, as that has a good effect.

Something like "animal magnetism!"—Take a chicken or a turkey, and lay it on its back; then with a piece of chalk draw your hand along before its face to the length of your arm, and it will lay still for some time. Then stand the chicken or turkey on its feet, and draw your hand down its bill, or draw a mark round it, and it will remain in this "magic ring" for a time!

In breaking a shy or skittish horse, never strike him for swerving, but if he is frightened, be gentle; get down, rub him in the face, lead him to the cause of alarm, then back to where you got off, and then ride him back again to the object. Repeat this in the force of his habit, and he will be submissive. If an old horse, you may mend his habits. In training horses to go over bridges, it is a good plan to lead them over some three or four bridges.

To make a horse stand still while you mount. Get on and dismount four or five times before you move him out of his tracks, and by repeating this, any horse will stand still.

In conclusion, I would advise all breeders to be kind and gentle to their foals, and by so doing I will venture to say they will seldom have vicious horses to tame.

I am, sir, your obedient servant, D. O.

The foregoing article is taken from the "Spirit of the Times," and has been going the rounds of the agricultural papers, accompanied with the unqualified commendations of the press. It has given rise to a great many very pretty remarks about humanity, the brutal treatment to which this noble animal is sometimes subjected, &c. &c. Now whilst we hope we are not wanting in *humanity*, and will yield to none in our fondness for this faithful servant of mankind, we cannot help laughing at the sickly sensibility which is shocked at the idea of giving a horse a sound threshing when he deserves it.

To those who have such scruples, we would commend the consideration of the grave question, that once engaged the attention of the scholists. "If the amount of pleasure to mankind derived from the increased flavor of a whipped pig, be greater than the pain inflicted upon the pig, whether is it justifiable to impose the flaggellation," and it was decided unanimously by the great body of pig eaters that, under such circumstances, the flaggellation might justifiably be imposed. We are prepared to maintain against all comers the justice, propriety, and policy of this decision, and by the same course of ratiocination, we arrive at the propriety of subjecting, subduing, or "breaking" rather than "training," a horse. "Many *horses* of many minds," and manifold are the kinds of treatment required for different dispositions. The *easiest* way is to soothe, the *surest* to subdue. For the first, the directions of D. O. are excellent, and such will perhaps do well enough for the animal who is to be broken down with daily toil, who has no time and less disposition to play tricks: they generally become tame enough. But it will not do for the mettlesome riding horse, nor will it answer for the high blooded steed, within whose power you place the safety of your wives and children. They should be completely subjected and subdued to the will of man; this is only to be accomplished by a due admixture of reward and punishment. With many of the very best horses the latter ingredient must greatly predominate.

A horse that is merely tamed is never safe; you are always trusting to his good nature and good sense, which frequently fail him. Like his master, his dormant passions are sometimes aroused, and whether fear or anger get the better of him, he is equally dangerous: but when a horse has learned to *fear* the voice or the whip of his master more than any thing else, then may you trust him.

The best breaker of horses we ever saw began with a wagon whip—(don't shudder, remember the pig question) he would take an untamed three year old in a stable room, free from stalls and every thing else except the walls that confined him, and begin a regular set-to with him. It was a sight worth peeping at through the cracks; the contest commenced with a gentle touch on the hip, which was responded to by a fling of the hind leg that would make the joints crack again. By repeated applications of the whip, the animal would become infuriated, and make at his tormentor with open mouth and curled lip. The calm and piercing eye of the man, with a short sharp crack of the dreadful whip, would cause him to change front to rear, and try the virtue of his heels. Here again, his wily adversary was ready for him, and every kick was answered by another crack. This course was continued until the animal was com-

pletely *subdued*. Soothing and caressing now took the place of whipping, interlarded with occasional menaces, as there appeared any symptoms of a relapse. All that he had now to do was to signify his pleasure, and obedience was the certain result. Now it was, that he commenced a system similar to that of D. O. Much pains and great perseverance were used to induct the animal into a knowledge of his duties. He had undergone a discipline that he would never forget: he had learned his first great lesson, to recognise the presence and authority of his keeper. We have seen a horse so broken start to run in a fright, when a single word from the well known voice of his driver would render him as quiet as a lamb. This perfect state of vassalage, it is true, can only be induced by a thorough horseman, but when once established, it may be preserved by a little management forever. A horse broken in this way is often worth hundreds more than one, that has never been thoroughly subdued; if broken limbs and necks will warrant the difference.

For the Southern Planter.

POULTRY.

My Dear Sir,—If I understand you rightly, you are particularly desirous to make your paper acceptable to the female portion of your readers. I hope therefore I shall not intrude in offering the following hints upon a subject entirely within their department.

By no one in the world are the products of the poultry yard more esteemed than by the Virginia farmer. What is his breakfast table without its accustomed supply of new laid eggs, and what avail his early peas, if they are not flanked by his favorite accompaniment of fried chicken? But is he sufficiently careful to insure the requisite quantity of these good things, which fill so important a space in his culinary department? Does he provide his lady, who, it is taken for granted, is always ready to do her part, with the houses, yards, and appliances requisite to enable her to give full scope to her genius in the poultry line? I fear not. I dare say the ungrateful wight oftentimes stuffs himself with pullets, eggs, and chickens, without a thought upon how little he has afforded towards the delightful repast he is enjoying. Nay, I would not be surprised, if the ungrateful recipient of such bounties should be frequently heard to grumble to his better half about the injury her fowls have done to his new sown wheat, their ravages in the garden, and mutter something about dispensing with the whole lot, as costing more than they come to. Talk about dispensing with her hens! The good lady gives an incredulous shake of her head; she well knows that it is all *talk*, and entertains no fears for any of her favorites, except those that are destined to tumble into that great reservoir that has engulphed so many of their progenitors. But still, with that kindness and forgiveness, which is a part of her nature, she feels sorry for his vexation, and wishes much, that the man could eat the hens without quarrelling about their depredations. Well, ladies and gentlemen, between you, this may be easily accomplished; and as self constituted arbitrator, I require you to mutually sign, seal, interchange, and *observe* the following articles of agreement.

The gentleman, on his part, agrees and undertakes to erect, or cause to be erected, forthwith, a henery, or house of brick, twenty by twelve, with one door and four small windows in the front, or south side, with blinds which can be shut or opened at pleasure; the roof to be well covered with shingles, and the floor to be of dirt. He furthermore agrees and binds himself by these presents, to enclose a yard of 120 feet square, with a good and substantial paling, of not more than one and a half inches in the interstices, eight feet high, the tops whereof shall be sharpened to a point. He shall moreover, in the part of this enclosure opposite the door of the house aforesaid, insert a gate properly fixed and adjusted for the ingress and egress of a female of—dimensions (here measure the lady, or her maid, as either is the greatest in circumference and insert her proportions;) also he undertakes and agrees to furnish the house aforesaid with as many rows, as may be necessary, of boxes, divided into compartments of such size and kind as are suitable for the accommodation of a genteel and respectable hen; also, in the roof of the house aforesaid, to place roosting poles, with planks under them, to catch and retain, until it is needed for garden purposes, the manure of the hens aforesaid.

Now, in consideration of the undertakings of the gentleman, hereby expressed, or intended to be expressed, the lady, upon her part, undertakes and agrees, that, upon the happening of such contingency as is herein provided for, viz. the building and erection of the house and enclosure aforesaid, she, the lady aforesaid, will, in the first place, by means of the enclosure aforesaid, forever warrant and defend the gentleman aforesaid from the ravages of the fowls aforesaid, or from any harm or injury happening or resulting by, under or through them, the hens aforesaid, or by, under or through any of their heirs forever. Moreover, in consideration of the premises, she undertakes and agrees, that by building nests, and keeping the same, with all other parts of the premises aforesaid, scrupulously

clean, and by paying the requisite attention to the matter, she, the lady aforesaid, will warrant and guarantee, and by these presents does warrant and guarantee, unto the gentleman aforesaid, a bountiful supply of eggs, hens, pullets, fowls, and all and every of the appurtenances thereunto in any manner, shape, or form, belonging, or in any wise appertaining unto him, and his heirs forever. In witness whereof, the parties to these presents have mutually signed, sealed, and interchanged the same.

[*Seal.*]
[*Seal.*]

In conclusion, sir, permit me, in consideration of the family jars I propose to quell, to sign myself,

Your obedient servant,
A. PEACEMAKER.

C. T. BOTTS, Esq.

We strongly suspect the writer of the above to be a cunning country attorney in disguise; who, under the semblance of fairness and a love of quiet, seeks to inveigle the ladies of Virginia into a contract, which imposes upon them heavy burdens, without a fair equivalent.

By the proposed agreement, the ladies are to undertake forever to supply a rapacious monster of a man with all the delicacies of the poultry yard, whilst he, kind soul, on his part, will undertake to devour them; for, except the expenditure of some pitiful sum in buildings, this seems to us to be about the amount of the gentleman's part of the contract.

As a gallant defender of the rights of the sex, we feel bound to expose what we consider to be the insidious nature of this proposition. We have done our duty, our fair friends can do as they please.

For the Southern Planter.

A primary object with you, Mr. Editor, being to procure practical information for your readers, I take the liberty of sending you a northern agricultural paper, containing instructions for the "culture of Sugar Beets and Mangel Wurtzel"—and, at the same time, to suggest the expediency of referring to your files of northern and eastern agricultural journals, as a source of the most reliable information on the subject of root culture.

My own ignorance may mislead me—but I cannot and do not believe that there is *one* of your Virginia subscribers qualified by his own *practical experience*, to write upon this subject—unless, indeed, Mr. Corbin Warwick be of the number; his farm being the only one I have seen upon which a systematic course of root culture for stock feeding has been pursued for any length of time. I do not believe another farm can be found, which has yet afforded one bushel of roots per head, per winter, for the horn cattle upon it. But be this as it may—those of us who have no information to give, but on the contrary, sorely feel the want of it—when we seek instruction from agricultural journals, require—not theoretical essays—nor accounts of crops made and fed away by the fire sides of gentlemen of leisure—but we want the results of actual experiments with various crops, and "all how and about it" so far as the contributors to agricultural journals have *tried them.*

For myself, I know it would be presumptuous to profess to give any thing original. Some gleanings, however, which I have picked up from the advice and experience of others, I will mention. I have cultivated the Ruta Baga turnip several years—the Mangel Wurtzel one year, and the Sugar Beet one—yet am by no means certain that crops of corn upon the same land, would not have given more and better food, especially if ground in the cob. As to cultivation—following the published experience and practice of northern and eastern cultivators, I have always passed a roller over these crops immediately after sowing. The roller is also used after seeding oats with clover and meadow grass, if the land be dry enough, and I think the practice a good one.

The use of the coulter, especially in the culture of Ruta Baga, was recommended to me by a friend from the upper country, and has been successfully pursued ever since.

A means of protecting the turnip crop from the fly, by sprinkling tobacco trash over it, was suggested to me by one of my negroes (an old farm hand) some years ago, and another and a better one besides—to wit: Soot. And this reminds me of another piece of information, probably (for I do not now remember) derived from the same humble source, which I have tried with equal success—pounded charcoal sprinkled over melon, cucumber and other similar vines, when the dew is on, effectually protects them from the bug, which otherwise very often destroys them. All these things, however, are probably familiar to many of your readers though they were new to me.

But, about the root crops—As every man is apt to form some opinion upon subjects of a practical character that arrest his attention, so, no doubt, many experienced farmers have formed opinions upon this; and for the general good, these opinions, especially where they have been tested by experiments, should be given to you.

It has occurred to me, (and I mention it only to elicit the opinions of *practical* men, not pretending to be one myself,) that where the system

of agriculture, as in the Northern and Eastern States, is upon a smaller scale, and in many particulars necessarily different from ours—(the climate being so much less favorable than ours to the growth of Indian corn) the field culture of roots may form an essential part of it. But here, in a corn, wheat and tobacco growing country, where all the manure we can raise is required for those crops—where, among the corn, upon good land, we can raise large supplies of cymlins for summer, and pumpkins for autumn and early winter feeding—it may be questionable whether Virginia farmers can well go farther in the root culture, than a good crop of Ruta Baga turnips, which keeps well through the winter, gives large returns, and requires cultivation at a season when it can most conveniently be afforded.

These, however, are only my own "notions," entitled, I freely admit, to very little consideration—but I shall be gratified if the expression of them has the effect of drawing out those who really are qualified, to give their opinions and the results of their own experiments through the Planter.

One word more. A writer in your last paper seems to think himself entitled to the reward of £20,000 offered by the British government for an antidote to the depredations of the turnip fly. I think my old man Dick has the better claim, and if there is to be competition for the prize, insist upon putting him in as a competitor.

Very respectfully,

A Subscriber.

The article to which we are referred by our correspondent, is the following, from the American Farmer:

CULTURE OF SUGAR BEETS AND MANGEL WURTZEL.

As the culture of both these varieties of beets is precisely the same, we shall treat both under one general head. And before we proceed to lay down our plan of treatment, we will say to our agricultural brethren, that if they consult their interest, or give heed to the comfort of their milch cows, they will at once proceed to make arrangements for entering into the culture, though their first experiment may be made upon but a single acre. At three pounds to the acre, that quantity of ground will produce upwards of a thousand bushels, and when we say that we have seen beets, of either variety, weighing more than *twenty* pounds, we think we cannot be charged with exaggeration when we assume three lbs. as the average weight of an acreable product. With this brief introduction, we shall now proceed to give such directions as we believe will ensure a good crop.

Preparation of the Ground.

As soon as the ground is sufficiently dry for the purpose, it should be ploughed up with a strong team and heavy plough, as deep as possible. The ploughing completed, let the harrow reduce the clods by being passed over the ground lengthwise and cross-wise. The ground thus prepared should be permitted to remain until just before it is time for putting in the seed, when manure—well rotted is best—should be hauled on and evenly spread over the surface, at the rate of twenty double horse cartloads, say forty bushels each, to the acre. As spread, this manure should be ploughed in about three inches deep—As soon as this second ploughing is finished, the ground should be thoroughly harrowed to render the tilth fine, after which the roller should be passed over it, when it will be in a condition for seeding, which operation should be performed as soon thereafter as possible, as it is all-important to put the seed into a fresh bed.

Time of Planting.

For a general crop, from the middle of April to the 20th of May, is the period when the seed should be sown, though good sized beets could be raised, in strong ground, at a much later period, say the last of May. We, however, recommend early planting.

Of the Soil.

The soil best adapted to the growth of beets, is a deep loam, or rich sand moderately dry.

Method of Planting.

If you have a drilling machine, (and if you have not one, we would advise you to get one,) all you will have to do is to put your seed in it, and after staking off your ground in rows *two feet* apart, to drill in your seed. But if you have no machine, then get a wide mouth bottle, or tin horn with the large end stopped, put your seed into one or the other, and after having a drill made an inch deep, go along the drill with your bottle, or horn, in hand, and drop the seed therefrom, about four inches apart, let a hand follow the dropper with a rake, and cover over the seed as dropped, reversing the rake and pressing down the furrow with its back.

In this way, two smart, active hands could put in an acre a day. With a machine four acres may be put in, in the same time with ease. The machine makes the furrow, drops the seed, covers them, and rolls the ground all at the same time. Mr. Page of this city has a drill which is highly recommended, a notice of which will be found in another column.

Preparation of the Seed, and quantity to the acre.

Make a decoction of horse dung, in sufficient quantity to *float* the seed, into this put in the

proportion of four ounces of saltpetre to each gallon. In this soak the seed from 24 to 48 hours, when they will be fit for drilling. As you take them out for that purpose roll them in plaster; 2 lb. of seed to the acre is about the right quantity, though 1 lb. sowed with great care would answer.

After Culture.

After the beets come up and are three or four inches high, let careful hands go through them and thin them out, so as to stand from eight to twelve inches apart in the rows. And as the beets generally come up double, one must be drawn out, otherwise they are liable to grow crooked, or lap over each other, and materially lessen the product. At the time this thinning is going on, the beets should have the ground stirred around them and between the rows, so as to loosen the earth, and cut up every vestige of weeds or grass.

If a small cultivator, 18 inches wide, were to be procured, to run between the rows, it would lessen the cost of culture wonderfully, as then the hoes would only have to stir the earth around and between the roots. The great object in cultivating these roots, is to keep the grass and weeds down until the leaves expand sufficiently to repress their growth. In a word, keep the earth loose and clean; but *never* hill. If the cultivator be passed three times through them, and the hoers weed between and around the roots that number of times effectually, the business of culture will be found to have been performed.

Pulling the Leaves.

Late in the summer, when pastures begin to decline, and afford but little succulent food to the milch cattle, the leaves of either of these beets will be found to furnish a most excellent resource, as they may be stripped of all their foliage except the crown leaves, without injury to the root, at least three times between that time and their being harvested. In stripping the leaves, they should be pinched off with the finger and thumb.

We have thus early called attention to this subject, in the hope that it may awaken a sufficient degree of enterprise to induce many to commence the culture, as we are certain that, if they but once make a beginning, they will continue it.

A GOOD EXAMPLE.

The following letter from Commodore Jones, places in a strong light the profits of agriculture, even under adverse circumstances. A detailed account of the Commodore's agricultural life, from his own pen, would, we think, form an interesting and instructive article, such as we should very much like to see gracing the columns of the Planter. The same manly independence and indomitable energy, that have won unfading laurels for the naval hero, are conspicuous in the Virginia farmer. Here is one of nature's noblemen, a man, who is resolved to wrest fortune to his purposes, and to make himself independent by his own exertions. He chooses agriculture for the purpose of effecting his ends, and finds his noble energy amply repaid. What a glorious example is afforded by this self-denying, energetic pursuit of independence. The flag of our country is ever safe in such hands; he, who will work, will scarcely fail to *fight* for his liberty.

* * The first steps toward the improvement of land, are to cultivate less land and do it better, collect and apply at proper times, and in due season, all the manure that can be raked and scraped about the premises. If your land is deficient of calcareous matter, supply it either by the application of lime, marl, or bone dust. Cost what it may, it will repay you, and with double interest; although your means may not admit of your improving more than one single acre the first year, the increased products of that acre will enable you to improve two the second, and from those two you may improve [with the help of the first one] six the third year, and twelve or fifteen the fourth year, and so on progressively. For if it be true, that money makes money, so too, in a pre-eminent degree, does manure make manure, for there is no usurious law to limit the interest which the farmer may draw from his manure bank.

I was thirty years of age when I commenced farming, and I affirm, that no regular farmer in Virginia ever commenced under such appalling circumstances as I did. In 1819, I found myself in possession of 140* acres of land, one half in wood, the other in hen-grass and deep gullies, without a pannel of fence or a building of any description on it, and without a wheelbarrow load of manure or any thing to make it of. 'Tis true, I was in the receipt of about $700 a year from another source; but what was that when compared with my wants? Houses to build, laborers to hire, feed and clothe, farm to stock, myself with somewhat extravagant habits to support, &c.: in short, every thing to buy and nothing to sell!! And what was worse than all, discouraged at every step by my neighbors, who mostly affirmed, that Fairfax land could not be improved; and some went so far as

* This lot of 140 acres was designated in the division [by which it fell to me] of a large landed estate, by the commissioners, as lot No. 3, "Poor Hill."

to say, that clover and plaster would even impoverish it, whilst others declared that plaster of paris would not act at all in Fairfax, to which my general reply was, "I'll try it." I was adrift in the world, without any spot on the wide earth to which I could point as my home. I had to choose between the life of a wanderer, wasting my little income in hotels and boarding houses, or in struggling against the thick array of difficulties above enumerated, in endeavoring to build up for myself a home and a resting place in my own native land. I chose the latter, and I rejoice in the decision, and a kind providence has smiled upon my exertions, and spared me to enjoy the fruits of my labors, which have not altogether been lost, [though often injudiciously applied] even on Fairfax land. To what extent I have succeeded, it would not become me to say; suffice it that my farm on which I reside in the enjoyment of wife, children, and friends, has grown from 100 [for I sold 40 acres of the original wood lot, to get money to help along with] to 420 acres, including the 40 sold, which I have since bought back. The whole amply stocked with the choicest varieties of fruit trees, all planted by my own hands. The arable land is in good heart, some of it upon which I have applied lime, only commenced with six years ago, is first rate.

THOS. AP. C. JONES.

For the Southern Planter.

Mr. Editor,—I have lately, with the proceeds of a more unfortunate business, purchased a farm, by way of *experiment*. About one-fourth is rich creek land, and the balance very poor, sandy highland. The tract contains about fifteen hundred acres. My pecuniary means have been pretty much absorbed in the purchase of stock, and negroes, repairing buildings, &c. My plan is to get into cultivation, first, such of the low grounds as are not yet cleaned up. This is a light job, and I shall be able to accomplish it in the first twelve months. To continue the low grounds in their present state of fertility, I shall once in three years turn under the sod of grass with which they are now set, and cultivate a crop of corn upon the top of it, returning again immediately to grass. Of course for this purpose my low grounds will be divided into three fields that I may have one every year in corn.

Of my upland, I shall next proceed to make three lots, of twenty acres each. On one of these I shall sow oats next spring, buckwheat on another, and rye on the other in the following fall. All the manure I can make and scrape, I shall apply to the top dressing these several crops. Before they become quite ripe, I shall turn them in. In the fall following, I shall sow clover seed on one, clover and timothy on the second, and Kentucky blue grass, if I can get the seed, on the third. For two years, I shall husband all my resources for nourishing and top dressing these several crops. I shall then begin with No. 1, and turn under the growth and sod for a crop of corn; the next year, No. 2, for a crop of tobacco; and the third year, No. 3, for corn. I shall by this time have six lots, three above, and three below, rich enough to pay for the expense of cultivation.—By this time, my stock, and consequently, my means of making manure, will have so far increased, as to enable me to top dress forty acres more of my high land. This will increase the size of my lots, and the extent of my operations to 33 1-3 acres each. Without then ever cultivating an inch of *poor* land in corn, I shall, in the course of a few years, have a profitable farm, as extensive as a reasonable man would desire.

It is true, that, making a draft only upon the fifty acres of low grounds in corn, for the first year or two, my expenditures must be very economical, and my stock very small; although I am resolved to keep as many of the latter as I can keep *well*.

Moreover, I am aware, that if I could command large supplies of ready made manures, either natural or chemical, that I could procure quicker returns, than this system would afford me. I am satisfied that I ought to get my land to a certain point of fertility before I attempt to take any thing from it. In what cheaper manner can I effect this, than by taking it little at a time, and by the simple operations of ploughing and sowing, assist the earth to gorge herself? If any of your experienced practical readers will review this plan, they will oblige

A THEORIST.

So far as improvement by turning in green crops is contemplated, we shall strengthen the intentions of our correspondent by the following quotations. The first is an extract from a report of the editor of the Massachusetts Ploughman of a farmers' meeting in the state house at Boston.

Mr. Stanley said, in regard to vegetable manures, he thought well of the practice of turning in green crops—that a neighbor of his was fully satisfied of the benefits derived from the vegetable growth on an acre. He thought lands should not lie in grass longer than four or five years, for it will then be as full as ever of the roots of grass, and if it is then completely turned over, the whole vegetable matter will become manure for future crops. He said he once doubted whether the grass and grass roots on one acre of land, after the hay crop was taken off, would weigh 12 or 13 tons, as some had as-

serted; but on making a little calculation he thought the assertion correct. He therefore concluded that any farmer who frequently turns these 12 tons into manure by ploughing, would enrich his lands much sooner than one who should suffer his mowing fields to lie many years without ploughing. (Was not this a correct conclusion? How can we avoid the force of this reasoning? Ed.)

The other is a very excellent anonymous communication, directed to the editor of the Maine Cultivator.

ON GREEN CROPS FOR MANURE.

Although our most thonghtful farmers are now well satisfied that the raising of crops to be ploughed in while green will much enrich all kinds of soil, there are still large numbers who seem to doubt the efficacy of such a measure. At any rate the number of those who practice upon this principle is still quite small, and the friends of improvement in agriculture must wait with patience the operation of judicious examples.

It is strenuously asserted by some, that a green crop draws just as much of the food of plants out of the earth as can be returned to it again by the plough which is made to bury that crop! They are led into this error by assuming that all plants obtain their whole nourishment from the earth; when the probability is that much the largest portion of the food for plants is taken in from the atmosphere through the leaves. When a stick of wood or a tree is decomposed by the action of fire, what do we find of the whole contents but a little mess of ashes? Not one 1000th part of the weight of the wood. In these ashes will be found a small quantity of earthy matter, while all the remainder of the log has gone off with the smoke. We say that the log is *burnt up*,—but philosophy teaches that fire annihilates nothing—that it only produces a change in substances on which it acts. A log of wood, then, subjected to the action of fire vanishes into air and passes off directly into other plants through their leaves, or it falls to the earth to be taken up by the roots of other plants.

Furthermore we find that a plant weighing many pounds may be reared in a box of earth, nothing but water being added; and that when the plant is removed, the earth in the box will weigh nearly as much as when it was put there—showing that but a very little earth has been taken up into the plant.

Now the philosophy of raising green crops to enrich the soil on which they grow is based on the principle that plants obtain a large proportion of their food from sources other than the soil on which they stand. But the question is often put, why is not one kind of soil just as good as another, if plants obtain most of their living through the medium of the atmosphere? The plain answer is, that the roots do obtain some nourishment from or through the soil; yet if they obtained not a particle of anything but moisture, a *good soil* would afford a better *medium* through which to convey such moisture than a *poor* soil could do. A good soil lies more light and porous, admitting freely the roots of plants and suffering them to extend in every direction; while a poor soil lies so compact that roots cannot enter; or it is so open and exposed to the sun and air, that the roots perish for lack of moisture.

To give the soil a proper consistency, therefore, neither too close, nor too open; neither too heavy nor too light, is one great object with every good farmer. And it may be, that quite as much depends on this circumstance as on the quality of the food which we are supposed to supply when we apply our manures. The richest manures will fail to give a good crop unless they are so prepared and so placed that they afford a convenient passage for the roots, while almost any kind of manure, well applied, will prove of great service.

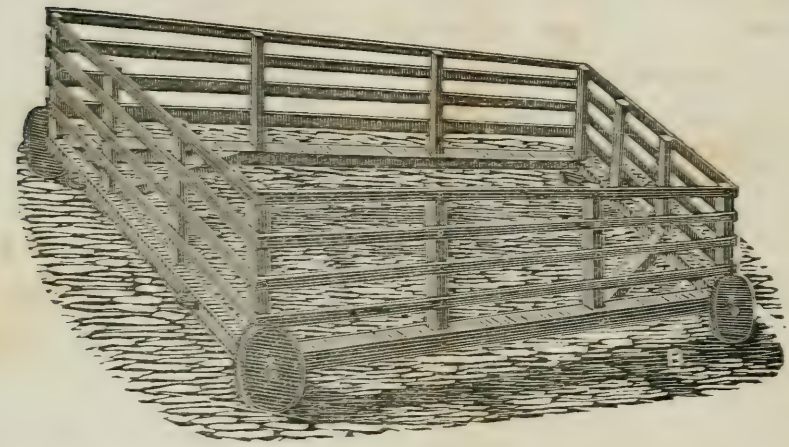
A leading complaint among farmers is, that they have not enough manure, that they cannot purchase it, and therefore their lands must lie till a more convenient season. This, with many, is only an apology for negligence and sloth; for we often find the very men who complain of the want of manure, neglecting year after year, to clean their barns and yards of the manures made by their own stock.

But if it be true that green crops, grown on soil will enrich the same if ploughed under and suffered to rot, then every man who has a team, may dispense with his excuse for suffering large portions of his farm to lie unproductive. Much of the pasture land of Maine is unproductive for the want of the plough. A few crops of grain were taken from the ground after the first clearing—no grass seed was sown—bushes or moss, or both have taken possession, and if, in modern days, a plough is brought into one of these pastures, it is for the purpose of filching out of the soil one more crop of grain, and then the land is suffered to recruit itself again till another harvest of rye is wanted.

Farmers of Maine, you should not further reduce your pasture lands with grain crops. Grain is an exhauster, and when it is cultivated the land which bears it should be manured in some form or other. Pasture lands which have lain long and are covered with moss may be ploughed in Autumn and sown with grass seed and with rye, to be fed the next summer by the cattle. This process will enrich, instead of impoverishing the soil. And any field may be made rich as it need be for any product by sowing and then

burying the growth by means of the plough. Three crops of buckwheat may be turned under in one season; or two crops of rye may be treated in that manner to great advantage. But who will dare to bury with the plough a crop of buckwheat or rye? Some think it an unpardonable sin. Why it may be reaped and saved, say they. But as to impoverishing the soil by taking off exhausting crops without putting on manure they have no fears. B.

A PORTABLE OR GRAZING PIG PEN.



For the Southern Planter.

Dear Sir.—As hog and hominy are inseparable with us Virginians, and having seen in your last number of the Planter, Mr. Fontaine's plan of a hominy-mortar, I am induced to send you a plan, or rather description, of my portable or grazing pig pen; hoping it may prove useful to some of the lovers of good bacon.—To those who keep up their hogs and have clover lots, it will be found very convenient for grazing them; it being only necessary to move the pen, from day to day, as they may require fresh grazing. It will also enable the farmer, annually, to manure a pretty good piece of ground for a sugar beet or some other root patch, during the months there is no grazing, by littering and moving as occasion may require, upon the ground intended to be manured. This, I consider no small matter. During the cold winter weather it will be found necessary to break the joints, before left open, between the planks on the sides of the pen, for the air to pass through freely, and also to give it better covering to keep out rain and snow; it having been only necessary to use bushes, while grazing, as a protection from the sun.

Well, now for the plan. Take four pieces of good oak scantling, or polls, three by four inches, and eight, ten or fifteen feet long, as may be preferred, and form as large a square of them as they will make, allowing an inch or two to project over at the ends of two of them, and enough at the ends of the other two, to fix a wheel on each, the scantling or polls, to be let into each other where they cross, by sawing in and cutting out so as to make them fall into each other. The wheels are made by sawing them off of a tree (gum I prefer) ten or twelve inches through, and two or three inches wide. The wheels being fitted on, it will only be necessary to insert a number of pins, three, four or five feet high, into the frame at proper distances with a large auger, to which the planks are securely nailed, which forms the pen. Care should be taken to let one pin pass through at each corner where the scantling crosses, so as to fasten the pen together. Place troughs in two of the corners, one for water, and the other for food; they answer also for braces. Attach a rope, grapevine, or hickory, twisted to one end, put in your pigs, lay on some brush to protect them from the sun, move often, water and feed well, and I insure good pork next winter. A half dozen pens will graze two dozen pigs, moved once every day on good clover.

If you, Mr. Editor, consider the foregoing worthy of a place in your paper, you are at liberty to insert it.

Respectfully, your friend,

WILLIAMSON TALLEY.

Hanover, March 1st, 1842.

THE LEVEL.

Under this head, we published an article signed "A Drainer," in the ninth No. of the last Vol. of the Planter. This article, being copied into the Farmers' Cabinet, is characterised by a correspondent of that paper, as "about as strange a jumble of ideas as could well be squeezed into so small a space," and in so designating it, we doubt very much, if he ever uttered a greater truth.

That we, confiding in our correspondent's experience, should have overlooked his mistakes is perhaps excusable; but that you, Friend Pedder, should have calmly, coolly and deliberately cut out, and copied such a monstrous absurdity, is, indeed, too bad. If a man should unfortunately be the father of an unworthy child, he is to be pitied, rather than blamed; but that any one should choose to *adopt* a crooked mis-shapen bantling, is truly astonishing. As we have been unintentionally instrumental in getting you into such a dilemma, we will do the best we can to help you out of it, by telling you what, we reckon, "A Drainer" meant to say.

He intended to assert, that a fall of one inch in fifteen feet had been found sufficient to carry off the superfluous water; that to obtain this, a level should be made in the ordinary form, with legs of equal length, fifteen feet apart at the base: having marked on the cross piece the place where the bob line plays when the instrument is resting on a level plane, cut one inch off one of the legs. Then, begin at the lowest point of the intended drain, and keeping the short leg always up the hill, cut down until the bob plays in place. Thus you will obtain a regular fall of 1 inch in every fifteen feet.

CORN PLANTER AND SEED SOWER.

We have had several enquiries for this article, and have been at some pains to ascertain the relative merits of those in use. We must confess we have not been altogether satisfied with any that has come under our observation. We have seen Bachelder's, Robbins', Bement's and Page's. Old's is highly recommended, but we have only had an opportunity of seeing an engraving, which did not clearly explain the implement. We waited with some anxiety for a new one, announced in a former No., and engraved and explained in the last Cabinet. It is plain enough, but not to our fancy. We have seen the slide tried in various forms, and indeed, exactly as Mr Jones uses it; but the same difficulty appertains to all; small seeds insinuate themselves between the slide and hopper; or they clog up at the bottom of the hopper. It is possible, if we could see the implement itself, we might find the difficulty removed.

Of the different kinds we have seen, we greatly prefer Page's, made in Baltimore, both for its simplicity and certainty. It is acquiring great reputation. We have procured one of these as a specimen, which we shall be happy to shew at the office of the Planter. We will order as many as may be wanted. We have also a few of Bachelder's, that are a well finished article. Price of both $25.

We were induced by the high encomiums bestowed upon it, to give $15 for one of Robbins'; any body may have it for fifteen shillings.

LIME.

We have received many requests from subscribers, particularly in the low country, to turn our attention to this important agent. So much has been said and written, that the subject is generally considered to have been exhausted. Nevertheless, our investigations of what has been written, has lead us through a labyrinth, pretty much to the point from which we started. Nothing can be more contradictory than the opinions of the most scientific; and our researches have brought us to the conclusion, that there are some important questions connected with this subject still veiled in doubt. There is no doubt that its chief action is chemical, and therefore that action will necessarily vary with the constituents with which it is brought into contact. These may differ materially, though imperceptibly to the casual observer, with every hundred feet of soil.

We have made arrangements to visit shortly some of the most experienced lime and marl users in Virginia, that from the *facts* they have observed, and the estimates they have made, we may assist our readers in the *practical* application of this powerful agent.

CELEBRATED CATTLE.

We are much afraid "t'is distance lends enchantment to the view," and that we see and hear a great deal of certain *stocks* in agricultural papers, calculated to excite the imagination, rather than to convey impartial descriptions of the animals. We are partly led to this conclusion by noticing the sale of Col. Jaques' celebrated "Cream Pot" cattle. The auctioneer's hammer is after all the true test of value, and we observe from Mr. Bement's letter, that this stock, of which so much has been said and written, was knocked down the other day at an average of $32 pr. head. We believe we know some *Durhams* for whom their neighbors would give about as much.

HAY, ROOTS, AND CORN.

Professor Coleman estimates, that to support a working horse for one year, it will require the produce of six acres in hay and oats, one acre in Indian corn, or half an acre in carrots or Ruta Baga turnips. The yield is supposed to be at the rate per acre, of a ton and a half of hay, sixty bushels of corn, fifteen tons of turnips, or six hundred bushels of carrots. From this estimate, he deduces the value of cultivating roots. We are inclined to believe if the expense of cultivation and harvesting are considered, that the horse can be kept cheaper, either upon the six acres in hay, or the one acre in Indian corn. But to this expense must be added the *risk* of keeping. We may be wrong, but we believe, that, after all is said and done, the Indian corn, well cultivated, will be found to be the best crop we can make.

From the Ploughboy.

Mr. Editor:—By giving publicity to the following letter, you will confer a favor on those who feel an interest in improving their stock of cattle. It is superfluous to add that the great skill and acknowledged success of Col. Hampton, in rearing the finest stock in the State, entitle his opinions to be regarded as of the highest authority; and the liberality with which he has communicated the results of his experience, entitles him to the thanks of this community.

J. T.

COLUMBIA, Jan. 24, 1842.

My Dear Sir,—Without detaining you with an apology, for so long a delay in answering your favor of the 31st ult., I proceed at once to the subject matter of your inquiries. All cattle imported from England, the north and the west, are very liable to be attacked by a fatal disease, which I take to be an inflammation of the brain.

Young cattle from eight months, to one year old, are less subject to it, than those more advanced in life. If they survive the summer and autumn, I consider them safe, although great care should be taken of them the second season. They should be brought into the State as early in the fall as possible, kept in good growing condition through the winter, and in the spring be removed to a high healthy position, have easy access to pure water, and their pasture as much shaded as the nature of the ground will admit. In August and September, they should be kept in a cool stable during the heat of the day and at night also, the dew at that season, being almost as injurious, as the intense heat of the sun.

With these precautions, I think more than half would escape the disease, the first indication of which, is usually, a languid appearance of the animal, followed by the loss of appetite, short quick breathing, with more or less fever, and not unfrequently accompanied by a cough.

I have hitherto considered this disease, when once established, incurable. I have recently learnt, however, that by sawing off the horns, close to the head, nine out of ten would recover. In two cases only, have I known the remedy to be tried, and in both, the experiment was successful.

I shall be highly gratified if any of these suggestions shall be useful to you or any of your friends; and wishing you entire success in your experiment.

I am very respectfully, and truly yours,

W. HAMPTON.

J. TERRY, Esq.

We were not aware that our friends of the South run the same risk in importing cattle, that we do in this region. The disease described by Col. Hampton, is precisely the one we have frequently alluded to as known here under the general name of distemper. The cause of this disease remains a mystery, since, here, it is frequently the result of removal from one neighboring place to another of apparently similar soil and climate. There is a popular belief, resting on what foundation we know not, that a little creek, about thirteen miles from the city, marks the boundary of this distemper. We

have heretofore hinted, that an investigation of this disease was worthy the attention of our men of science, both on account of its singular character, and because of the great good that would flow from the discovery of a preventive or remedy. The latter would be more extensively beneficial than we were aware of.

The attack is almost universally fatal, and sawing off the horns has, we know, failed to afford relief. It may have been resorted to too late in the disease.

TO DESTROY LICE ON CATTLE.

Wood ashes are effectual when properly sifted on. Any kind of sand or dirt, if frequently applied, will kill or drive away the lice. Cows that lie in the sand or loam, are less liable to be troubled with lice than those which lodge on plank floors. This is also the case with fowls.

Young cattle are more troubled with lice than old ones; and they should always be kept in open sheds, and be suffered to lie loose. They pass the winter better thus and are not so liable to be lousy. Some farmers take the trouble to burn loam and pulverise it, then sift it on the backs and heads of their cattle. As to applying lime or any scented substance to the floors of the barn we should doubt the efficacy; we should prefer to pull the floor entirely away. All oily substances are destructive to lice, but one application is not always sufficient since it cannot easily be made on all parts of the body.

A correspondent of the Central N. York Farmer recommends rubbing the skin all over with the water in which potatoes have been boiled. He says the lice will be all dead within two hours—that he has used ten kinds of the strongest poison to kill lice, all with effect, but none so perfect as this.—*Mass. Ploughman.*

TIME OF PUBLICATION.

By extra exertion we shall be enabled to get out the April No. of the Planter about the first of that month. After that, the work will be mailed regularly, and certainly, upon the first day of every month; so that subscribers, by a little calculation, may know precisely on what days to send to the office for their papers.

TO CORRESPONDENTS.

Several valuable communications have been unavoidably postponed to the next number. Our friends will see, and we hope excuse, the liberty we frequently take in razeeing and remodelling their communications. This is frequently done, not to improve the article in the abstract, but when we have several communications upon the same subject, to avoid repetition.

"Short and sweet" is our motto. But our friends need not trouble themselves with the labor of condensing. We have not the impudence to request them to furnish grain for our mill, and grind it too. If they will be kind enough to afford us the raw material, we will try and do that for which we are paid, manufacture it into a passable article.

DANGER OF BEAUTY.

In the first attempt made by Mary Queen of Scots to escape from her imprisonment in Lochleven Castle, she disguised herself as a laundress, with whom she had changed clothes, and when seated in a boat and putting off from the shore, she was discovered by lifting her hand to her head. The extreme beauty of her hand, with its whiteness, discovered her at once, and she was carried back to her chamber in bitterness and tears.

FIDELITY OF THE DOG.

In digging the ruins of Herculaneum, which was overwhelmed many hundred years ago by an eruption of Vesuvius, the skeleton of a dog was found stretched over the bones of a child. A collar of curious workmanship was discovered, on which was inscribed the history of this dog in Greek. The dog was called Delta; his master's name was Severinus. This animal had saved his master's life three times. Once he had dragged him out of the sea, when nearly drowned; once he had driven off four robbers, who attacked him; and once he killed a she-wolf, which flew at Severinus on account of his having taken her cubs from her in a grove sacred to Diana, near Herculaneum. The latter part of his life he attached himself particularly to his master's only son, followed him wherever he went, and would take no food except from his hand. No doubt the faithful servant perished in trying to save the boy's life. The collar is still preserved in the gallery of the Grand Duke of Tuscany.

Richmond Markets, March 17, 1842.

BUTTER—Mountain butter, wholesale 12½ a 16 cents for firkin; 20 cents for roll.

BRANDY—Otard, Dupuy & Co. $1 75; A. Seignette $1 35 to $1 40; Imitation 25 a 28 cents; Virginia Apple, new, 45c., but little in market: Northern Apple 35 a 40; Peach, dull at 75c. a $1 50.

COTTON—8 a 9 cents per lb.

COTTON YARNS—Richmond and Manchester (factory prices,) Nos. 4, 5 and 6, 20; 7, 8 and 9, 21; 10, 11 and 12, 22; 13 and 14, 23 cents; 15 and 16, 24; 17, 15; 18, 26; 19, 28; and 20, 28 cents.

CATTLE—For Cattle on the hoof, from $4 to $5 50 are the general prices. Mutton—There is great variation in the quality; indifferent sheep bring only from $1 to $2, while the finer qualities bring from that to $5 per head.

CHEESE—8½ a 9 cts. per lb., very scarce.

FLOUR—Demand limited—sales at $5 7-8 on the bank.

GRAIN—Wheat $1 05 a $1 15, are the prices now paid for good red and white. Corn—52½ cents per bushel. Oats 50 cents. Some few sales from wagons and depot at 55 cents. Very little Grain coming into market.

HIDES—Green 5 cts. per lb., Spanish 13 a 16.

LUMBER—Clear white pine $36; refuse clear 32b merchantable 22; refuse last sale at 14; flooring 15 a 20 per M.

LIME—Thomaston 95c. a $1.

MEAL—65 to 70 cts. per bushel.

PROVISIONS—Bacon—Smithfield and City cured 7c.; Baltimore and Western 5 a 6; old sides 2½ a 4½; do. shoulders 2 a 4c. Lard 6 a 7½. All slow of sale.

PLASTER—On the Basin bank $1 55½.

TOBACCO—Receipts light this week. We observe no change in prices—a few fine hhds. suited to manufacturing purposes, were offered in the market and sold at rates running from $7 a 9. General sales: Lugs $2¼ a 2¾. Leaf $3 a 5½ and 6½. as in quality.

TEAS—Imperial and Gunpowder 80 cts. a $1 05 per lb.; Black 45 a 60 cts.

WHISKEY—Very dull. We quote hhds. 23 cents; bbls. 24 a 24½ cents.

SEEDS—Clover Seed—$6 50 per bushel; Timothy $3 50; Orchard Grass $2 75; Herds Grass $1; Millet $2 50; Lucerne 37½ cents per pound.

SALT—Last arrival sold at $1 80, from the wharf.

SOAP—For brown 4 a 6 cts. per lb.; white and variegated 12 a 14.

STEEL—American blistered $135 to 140 per ton.

SHOT—Six cents wholesale.

SUGARS—New Orleans 4¾ a 7 sales; Porto Rico 6¾ a 7½; St. Croix 9 a 11.

EXCHANGE.

FOREIGN—On London 15 per cent. premium.
DOMESTIC—New York Checks, 7½ premium.
Philadelphia, 2½ a 3 premium.
Baltimore, 6 a 6½ premium.
North Carolina Bank Notes, par.
South Carolina, 5 premium.
Savannah, 2 premium.
Augusta, 2 premium.

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THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.* | Tillage and Pasturage are the two breasts of the State. *Sully.*

C. T. BOTTS, Editor. Opposite Merchants' Coffee House, Main Street.

Vol. II. RICHMOND, APRIL, 1842. No. 4.

For the Southern Planter.

EXTRACT FROM THE PROCEEDINGS OF THE AGRICULTURAL SOCIETY OF ELIZABETH CITY COUNTY.

"*Resolved*, That the Committee on the Best Mode of Cultivating Corn, consist of Dr. R. Archer, Thomas Lowry, and William Smith."

The Committee, to whom was referred the subject of "the Best Mode of Cultivating Corn," beg leave to report:

Corn being one of the principal and most important staples of our country, is it not surprising that so great a diversity of opinion should exist, as to the best mode of cultivating it? Every periodical you open, enlightens you with some new discovery, and the details of some enormous crop, and you congratulate yourself, that the best way is at last discovered: the next number you receive, throws you all aback again; you don't know what to believe; and at last settle down to the comfortable conclusion, that amongst such a multitude of conflicting opinions your own is as good as any, and your system of cultivation as likely to be the best as any other. One thing is certain, we have been raising corn under every sort of management for two hundred years—and when the land was good we could make good crops: it will grow in spite of you, if you only keep the weeds down. And your Committee have serious doubts whether our ancestors did not understand the subject as well as we do. There is no secret about it; for we all agree upon the main points. First, that the ground should be in good heart; secondly, that it should be well broken up and pulverized; thirdly, that the thickness of the planting should be in proportion to the strength of the land; and fourthly, that the soil should be freely stirred and the growth of weeds kept down. If we follow these rules we shall not fail in a good crop once in twenty years.

But how are these requirements to be fulfilled? We will answer to the best of our ability.

1st. The land should be in good heart. That is, it should be well drained of all superfluous moisture and then well manured; to manure wet land is to throw away both labor and manure. Putrescent manures of all kinds are applicable to the corn crop. Corn has been called a coarse feeder, hence undecomposed animal and vegetable matter, which might prove injurious to more delicate plants, is found highly advantageous when applied to this. The sea ore, which drifts so abundantly to our shores at certain seasons of the year, is a most valuable manure. One of your Committee in an experiment made last year, proved by actual measurement of the corn that the product from an acre manured from this substance, was fully equal to that from the same quality of land manured at the same rate, from the stable, farm-yard and pig-pen. It was spread broadcast from the beach and ploughed in when the land was broke up.

Manuring in the hill is practised very generally in some of the northern States. It certainly enables the farmer, who has but a limited amount of manure to go over a larger surface, but we doubt very much, whether, taking into calculation the benefit that would accrue to the succeeding crop of small grain, it would not be better to distribute it broadcast over a smaller area.

It may be that the northern summers being very short, the corn requires to be pushed rapidly forward; it has but a limited time to grow in, and may require the full benefit of the manure, applied directly to its roots, to urge it to maturity, before the frost overtakes it; but this argument however applicable to the north, is inapplicable to us, as our corn growing season extends over seven months of the year. We are, therefore, of opinion, that as a general rule, manures should be applied broadcast. When used in the hill they should be applied above and not below the corn, unless perfectly decomposed; for the tender roots, shooting down into a bed of hot fermenting manure, perish before they can tap the earth below, and the plant necessarily dies.

2d. The ground should be well broken up and pulverized. The proper time, undoubtedly, to break up the land, especially if it be a stiff or clay soil, is in the fall; for the action of the winter frosts upon it, breaks it down and renders it friable and mellow. When the depth of soil will allow, the deeper you plough the better, for you thereby turn up a new and virgin surface, and render the soil permeable to the roots of the plant, which in that case tend downwards, instead of running horizontally near the surface. When the soil is not deep, it is a good rule to cut every year, a little deeper than the soil, into the clay or subsoil; the depth of your ploughing this year, will be the depth of your soil the next; and in four years you deepen it four inches.

The ground having been well broken up in the fall, should be reploughed and harrowed in the spring, as late as possible; the advantage of this is twofold; first, it pulverizes the soil, and secondly, kills the young grass which begins to show itself at the first opening of spring, and thus enables the young corn to get a fair start, before it can spring again. Corn land seems to require a certain number of ploughings, and the more you plough before the corn is planted, the less you have to plough afterwards.

If, however, from scarcity of hands or other cause, the farmer can plough his land but once before he plants, instead of ploughing in the fall or winter, he should defer it to the last moment, and his planters should follow, almost in the wake of his plough; otherwise he will have a green field before his corn is up.

3d. The thickness of the planting should be in proportion to the strength of the land.

No proposition is more self-evident than this; for it would be just as reasonable to keep two horses on the food required by one, as to expect two stalks of corn to grow in a hill which could support but one. There appears to be a strong mania prevailing at this time for thick planting; it is a very commendable one, but it should have been preceded by another still more important, viz: a mania for improving our lands by ditching and manure. One of your Committee has raised upwards of ninety measured bushels of corn to the acre; it was planted in drills four and a half feet wide, and as thick in the step as it could conveniently stand; but no man in his senses would plant in this way, on any other than the richest land. We more frequently err in planting too thick than too thin; but there is one fact which should be remembered by every farmer; it is that a crop of corn well worked can be planted much thicker on a piece of land of given quality, than one slovenly cultivated.

4th. The soil should be frequently stirred and the weeds kept down.

The philosophy of vegetation is, that plants require heat, air, moisture, and the capability of extending their roots in search of nourishment. These requisites are all afforded, by frequent loosening of the soil, which besides, is next to irrigation, the best remedy against drought, and the firing consequent upon too thick planting. It is a great mistake to suppose that working corn during a drought is injurious to the plant.

Various implements have been designed for this purpose; the plough, the coulter, the harrow, and the cultivator are those in most general use. Recently a new implement, the subsoil plough, has been added to the others; and numerous experiments in England as well as in this country, go to confirm the high encomiums which were bestowed upon it at its introduction.

Having laid down the general principles, involved in the cultivation of the corn crop, your Committee now proceed to give their views somewhat in detail on the subject.

No crop pays better for the labor bestowed in manuring and working, than the corn crop. If the land will not produce twenty bushels to the acre, it will not pay the expense of cultivation, at least in this county. It would be folly, therefore, to plant it. But as the farmer must have corn, and as many of our fields will not go beyond that average, it follows that in self-defence he must improve his lands, or ruin himself by their cultivation.

Different opinions prevail as to the relative advantage of planting corn in drills and squares. We think the opinions of the most judicious farmers, as well here as at the north, incline to the square or check system, when the land is high and dry; on low wet lands the drill system is best, as it enables the water to run off more freely. But the chief advantage of the square system is, that it enables you to work both ways and you may then dispense, in a great degree, with the hoe. Besides, it lays the land more level and better suited to the succeeding crop of small grain. It is an error to suppose that corn requires to be bedded up to prevent its being blown down. However high you may throw the beds, you will always find that beautiful system of bracing roots, shooting out from the first joint and tapping the earth to support the stalk. There is ordinarily but one set of these roots, and whether the corn stand upon a level surface or on a ridge, the number of roots and braces is the same.

In working corn, the theory confirmed by extensive practice is, to plough deep in the early cultivation, whilst the roots are small and shallow, as they begin to extend themselves. The deep ploughing enables the roots to tap downwards, into the cool open soil, thereby avoiding the evil consequences of drought, and prevents their being cut and mutilated by the subsequent shallow cultivation. However strong the authority against us, we never can believe that the corn is benefitted by cutting and tearing the roots, which inevitably takes place if the deep ploughing be continued through the whole cultivation of the crop. The most reasonable system, then, appears to be, to commence, when the corn is just peeping out of the ground, with the harrow and run it thoroughly over every inch of the field: this operation pulverizes the land and arrests the young growth of grass, nor does it in the least disturb injuriously the young corn.

Having gone over the field, set your cultivators to work and continue them until the corn is large enough to thin out and replant; the earlier this operation is commenced in reason, the better, for it prevents the first planted from getting too far ahead of the replanted corn. Replanting is preferable to setting; it is more certain, more expeditious, and if the seed be

soaked, it will soon overtake the first planting. If the hoe is to be used, (and we think it should never be entirely dispensed with, although we have seen good crops made without it,) now is the time to use it with most advantage. It greatly facilitates the operation of thinning, loosens the dirt close to the corn, and enables you to draw it neatly about it, which at this stage of its growth is all-important; for, from the weight of the stalk and weakness of its roots, much will be found to have fallen down.

Having got over the thinning and hoeing, start your cultivators again, and run them until the corn is high enough to take the dirt from the plough.

Some of the most judicious farmers of our State, at this stage of the cultivation, use the single coulter with great advantage, run close to the corn; it loosens the ground nine or ten inches deep, and gives free access to the roots, moisture and air. On stiff lands we are inclined to think the coulter should never be dispensed with.

The corn should now have one good deep ploughing, the dirt thrown to it, and the middles thoroughly broke up. This is the only ploughing which seems absolutely necessary; the after culture can be effected with the cultivator, which in experienced hands is fully competent to keep the earth loose and clean.

We have said nothing of the shovel plough, because we think the work can be equally well done, without as with it, and the multiplication of implements only tends to increase the expenses of the farmer.

Generally speaking the corn crop suffers more from neglect in harvest, than at any other time. It is the busy season of the year, and every hand on the farm, young and old, is summoned to the wheat-field. Wo to the farmer whose corn-field is grassy when harvest begins: if he leave the field now, he can never get the upper hand of the grass afterwards. His interest, then is, to keep his cultivators running and hire labor for his harvest, even at double price. When the corn begins to silk and tassel lay it by, even if it should be overrun with grass; or at most, send in your hoes to chop down the tall weeds; for the injury done to the roots, by any farther cultivation, culd not be repaid by the destruction of the grass: it is at this time that the strongest draft is made upon the fertility of the soil, to develop the shoot and push the ear to maturity, and any injury done to the spongioles, the sole absorbents of the food from the soil, would materially interfere with that important process.

The corn having been laid by, the field for, the first time, since the planting, enjoys a season of rest, and the holyday continues until the time to gather fodder arrives.

Much diversity of opinion exists on this point. Some contend that the fodder should not be gathered at all, as the injury sustained by the corn is more than equivalent to the value of the fodder. However plausible this argument may be in grass countries, where fodder is of a secondary consideration, it has no application to us, even if it were true. Fodder is as indispensable to us as corn, and the farmer who would buy his fodder in preference to stripping his stalks would be justly considered as a fit subject for the lunatic asylum. But the fact is, as one of your Committee showed by an experiment last year, and which was reported to the Society in detail, that if the blades be stripped after the shuck has turned yellow, no perceptible injury is sustained by the corn. Corn thus stripped, was compared with other corn in the same field, which had been neither topped nor stripped, and there was no difference either in weight or measure. The conclusion, therefore, is, that it is a matter of perfect indifference, so far as the yield of corn is concerned, whether the stalk be first stripped or first topped, whether it be topped and stripped at the same time, or whether the tops and blades be left to dry upon the stalk.

An equal diversity of opinion exists, as to the best mode of gathering the corn crop; but it is generally acknowledged, that when it can be done, that is, when the field is not to be sown in wheat, the best plan is to shuck it in the field, directly from the stalk, especially in neighborhoods where your corn is liable to be pillaged. With the assistance of the corn-peg the operation is equally as rapid, as pulling the shuck from the stalk, and at night you have the satisfaction to know that your corn is safe under lock and key in your crib. After your corn is gathered you may cut down and stack your stalks and shucks, to be fed out in the winter.

But when the field is to be sown in wheat, this mode is scarcely practicable, as it would delay the seeding too long. It then becomes necessary to cut down the corn, and either cart it off, which is the best plan, or shock it in the field.

All of which is respectfully submitted.

Although we are not in the habit of inserting detailed reports of agricultural committees, which, excellent as they frequently are, contain generally, of necessity, a repetition of what has been published over and over again, yet so important is the subject of the above, so fitted to the season, so ably handled, and so peculiarly adapted for southern uses, that we have concluded to give it entire to our readers.

We do not mean to endorse all the particulars—only the general principles, of the report. We esteem it one of the fullest, clearest, and soundest expositions of the proper manner of cultivating corn, in Eastern Virginia, that we have ever seen.

TREATMENT OF HORSES.

We published, not long since, some excellent observations on this subject from the Albany Cultivator. The following are extracted from the Maine Cultivator, and refer principally to treatment on a journey:

"Much difference of opinion exists among drivers as to the best mode of feeding and of watering, and it was an old rule never to let a horse drink when he is warm; but this is now generally disregarded, and horses are invited to drink little and often while in the harness and when they are to stop but for a few moments. In regard to the kind of water proper for them, it has been supposed that puddle water, or such as has much earth and mud mixed with it, is better than any that comes pure from the brook; but this is not a very philosophical rule, as pure water is known to be less injurious to a healthy animal than any which has foreign ingredients in it. Puddle water, therefore, can be no better than pure water unless it is because it is usually warmer; and horses generally know enough to prefer this on that account.

"Though horses are often injured or destroyed by being suffered to drink too much cold water when they are warm, a much greater number have been ruined by giving grain at improper seasons. It has very generally been supposed dangerous to feed with grain a horse which has just come into the stable very warm and sweaty; but what evidence have we that they have suffered from this cause? Do men fear to eat immediately after quitting the scythe or the flail? Horses will not eat much immediately on stopping after a hard drive. What reason, then, for supposing they have ever suffered from this cause?"

We believe we have known violent cases of illness, both in men and horses, occasioned by eating, as well as drinking, whilst heated. A horse, after violent exercise or laborious toil, should be permitted to cool gradually before he is either fed or watered. If possible, he should never be stopped in the midst of violent excitement; but permitted to cool gradually under exercise. Otherwise, he should be carefully guarded against too sudden cooling, especially, should he in this state be particularly guarded from draughts of cold air. But if the traveller will relax his speed for the last mile or two of his day's journey, he may safely indulge his tired steed with a half hour's roll and cooling in the stable lot, before watering or feeding. One thing is certain, that no harm can come from a little care in this respect, and it is always well to err on the safe side.

We agree, however, with the writer that as much injury accrues from heavy feeding immediately *before*, as after, exertion; he goes on to say:

"It is violent exercise immediately *after* eating that ruins horses and causes distress in all animals that are put to it. And though every man of reflection knows violent exercise, immediately after eating, causes pain in his own stomach; yet many will give horses the most solid food just before commencing the labors of the day.

"Men who give their horses no grain, except on extraordinary occasions, will administer a dose of it just before starting for a day's ride. They would not give it on the night preceding, lest all its virtues should evaporate before daylight. Such practices ought to be ridiculed if we cannot reason people out of them.

"Stage owners in the vicinity of Boston formerly directed that *meal* and water should be given to the teams on stopping for a few moments to take breath; and it was not till many of these animals dropped dead in the service that the practice was discontinued. On opening the stomachs of these horses the meal was found in hard cakes undigested. Violent exercise probably prevented the proper action of the gastric juice on the food. Such exercise might cause an absorption of these juices and rob the stomach of its great means of disposing of its load.

"In former years we have travelled through the country and tried various methods of feeding, and have come to the conclusion that the best and heartiest food should be given at night; and this should be very soon after the horse is put in the stable. He will then soon eat enough to satisfy his appetite and will have time to lie down and rest—his food will serve during the whole of next day, and he will need but little baiting till he stops again at night.

"This will be found the best mode of feeding even when you can find the best of hay at public houses; for your horse will be all ready to start in the morning—he has had his breakfast the night preceding, and if he has stood a whole hour in the morning without eating, he will be a better traveller for it through the day."

MAKING CANDLES.

The season of the year has arrived for families in the country to make up their supply of candles for the year, and as much trouble and extra labor is occasioned by want of skill, I will, in order to enable people to obviate this, give some brief directions for dipping candles.

The tallow, when melted, should be ladled into a wooden vessel of convenient width and depth, which has been previously heated by filling it with boiling water for an hour or more. Fill the vessel within an inch of the top with

melted tallow, and keep it that height by adding hot tallow or hot water. By this means the candles will be kept of a full size at the top, and not taper off to a point, as is often seen with country candles.

The tallow, when used for dipping candles, should not be too hot. A temperature that will allow the finger to be dipped in without burning, is sufficiently hot, and at this temperature the candles will take on the tallow very fast. The wicks should be lowered into the melted tallow gradually, and should be lifted out of the tallow so slowly that when the bottom of the candles are clear from the surface of the melted tallow, no tallow will run off them. When the candles are raised quite out of the melted tallow, the tallow will run off the candles in a stream, whereas if the candles are raised out slowly, not a particle of tallow will fall from the candles. A few trials will satisfy any person in this matter. If the tallow is boiling hot, the wick will not take on the tallow to any considerable extent. When candles are raised out of the tallow rapidly, the candles will be large at the bottom, and the tallow will extend below the wick, so that when burnt in the candlestick a piece of the candle will have no wick in it; and, therefore, for burning, will be useless. Where persons have no suitable wooden vessel, an iron vessel will answer for a dipping vessel. When tallow has been thoroughly melted over the fire, should it be dirty or impure, throw into it, while hot, a small quantity of finely powdered alum, and in a short time a scum will be seen rising to the surface, in appearance like dirty froth. Skim this off as it rises. This scum will rise for half an hour or more. These directions are plain and easily complied with, and one trial will be satisfactory. Persons, by following these directions, will save more than one-half the usual labor of making candles, besides having better candles. I speak from abundant experience, and therefore with full confidence.

Journal of Commerce.

HORSE SHOEING.

A writer upon the subject of "shoeing," adverting to the use of the frog and the diseases that proceed from its inaction, maintains, that it should be always, as in a state of nature, subjected to pressure. He gives the following directions for shoeing:

"The horse's foot being circular and not oval, the shoe should be made in that form; or rather the hoof should be measured, and the shoe made exactly to correspond. An oval or elliptic foot is generally, nay, we may say always, diseased. It has assumed that shape in consequence of the contraction of the bars, brought on solely by a diseased state of the frog for want of pressure; and in no one instance of oval-formed feet will the frogs be found healthy. The moment the foot is lifted from the ground, the smell indicates the diseased frog, though perhaps cockney equestrians consider this the natural perfume of the organ when in health.

"The shoe should be as light as possible consistently with the labor the animal has to undergo. Before it is put on, the hoof should be pared away toward the heels, in such a manner that without the shoe the horse should stand with the frog close to the ground, as when in a state of nature; when the shoe is on, it should be filed away towards the heels, being left only sufficiently thick to enable the frog in the natural position of the animal without a rider or burthen, just to clear the ground; so that when the horse bears its burthen or its rider, the frog of the shoed foot should receive the same pressure from the ground that it would do if the shoes were taken off and the animal turned loose. When a horse is shod according to the present system, besides the various diseases brought on by the want of the action of the frog, the animal walks upon *its toes*, (the expression cannot be misunderstood,) and the proper muscular action of the foot and leg is perverted. Hence many horses fall dead lame without the farrier being able to assign any cause for it, although he will talk dogmatically enough on the subject to confound those who know no better than himself."

The following is to be considered, we think, rather curious and interesting than extensively useful. With proper care it might make a very pretty and singular fence.

LIVING AND ORNAMENTAL FENCES.

At a recent meeting of the Botanical Society of London, Mr. D. Cooper gave an account of a new living fence, formed by planting young trees in a slanting position, every tree leaning the opposite way, so that they will cross each other, and then at the parts which come into contact, take off from each a piece of bark, and tie close together, covering the part with clay. This grafts each tree into its neighbor, and forms in a few years, a living fence, with diamond-shaped openings. The plan is an excellent one for ornamental fences.

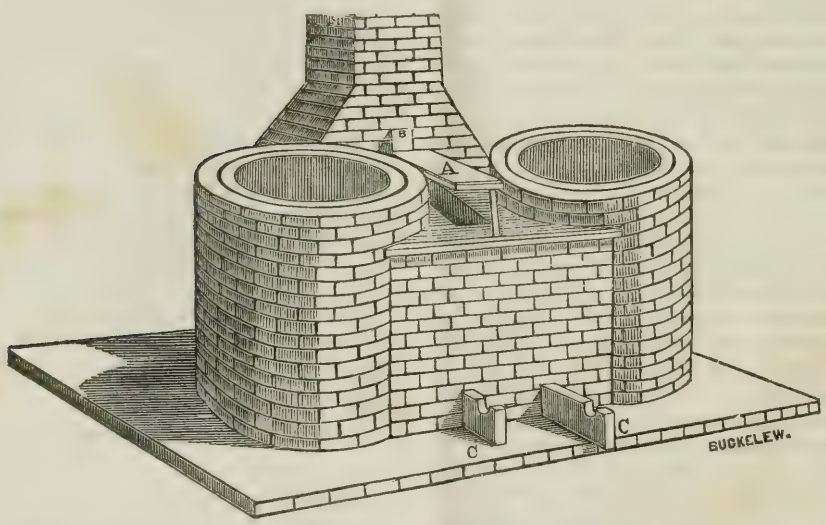
POTATO.

At one of the agricultural meetings, which are held regularly in Boston by some of the farmers of Massachusetts, the cultivation of the Irish potato was the subject of discussion. Upon many points a great difference of sentiment prevailed, but the current of opinion seemed to run in favor of planting shallow, using large seed,

whole, instead of cut, and taking off the blossoms. Mr. Plunkett, to whom much deference seems to have been paid, expressed the opinion, that the round, and oblong round, varieties are adapted to light open lands, whilst the flat kidney, or egg shaped, should be appropriated to stiff clays; the warmer the climate, the greater the necessity of a damp, cool soil. He also thought, that the quality might be determined by the shape. The oblong round yield least starch; next the round; the flat kidney shaped, the most. Where the productiveness is great, the quality generally is not good; where the quality is good, the yield is not great.

To our surprise, Mr. Cole, the Editor of the Farmers' Journal, expressed the opinion, that it is always better to get seed from the South than the North.

BOILERS FOR COOKING FOOD FOR STOCK, &c.



The above arrangement, together with the peculiar construction of the fire-place, are believed to be original in invention and novel in practice. An experiment with a fire-place without *draught-hole or grate* was first made at the sugar-refinery of Joseph Lovering, Esq., in Philadelphia, in 1837, where it was found to succeed in the most perfect manner. The fire is lighted on the top of the fuel, and is operated upon by the air from above, on the principle of the blow-pipe; by it the smoke is forced downwards through the body of the fuel, becoming ignited in its passage through the flame, and adding much to the volume of heat while passing under and around the boiler on its way to the chimney. Thus the smoke is consumed, none issuing from the top of the chimney after the fuel has become perfectly ignited—a consideration of great importance to those in the vicinity of extensive manufactories. The fuel is wood, cut into lengths to suit the size of the fire-pit, which pit may be constructed at the sides and bottom with common bricks, the archways, by which the fire passes to the bottom of the boilers, being turned with fire-bricks. This arrangement is adapted for boiling or evaporating generally, and particularly for the cooking of food for stock either on a large or small scale, none being more economical or convenient for heating water for dairy use, the scalding of hogs, &c. It was at first intended to confine the use of these boilers to the desiccation of beet-juice in the manufacture of sugar, but it was perceived that the principle of operation is applicable to many other purposes, especially to the evaporation of the juice of the maple and corn-stalk in the fabrication of sugar, the power of suddenly checking the fire—as instantaneous as the turning off steam—being peculiarly adapted to such nice operations; at the same time giving the

means of applying a greater or less degree of heat, withdrawing it altogether, or transferring it to other purposes, by a movement the most simple. The boilers may be made of thin boiler-iron, the bottoms nearly flat, and the sides perpendicular, with a flange turned on the top, the depth being in proportion to the circumference. In setting, they may be placed with the bottom within three inches of the bed of brick-work, the fire from the pit passing under the arch and spreading over the bottom, escaping by a passage at the opposite side, and making the circumference of the boiler before passing off by the chimney; the boiler itself being surrounded by a *jacket* of sheet-iron, of size sufficient to leave a space of one and a half or two inches, for a flue between it and the boiler; and against this the brick-work is to be built. Put the ingredients to be boiled into one of the boilers, withdraw the iron stopper C, formed of a flat bar of wrought-iron three inches wide, and light the fire, regulating the draught by raising or lowering the iron cover A, which must be made to close tight when put quite down. While this is progressing, make ready the other boiler, and when the food in the first boiler is done enough, replace the stopper, and withdraw that belonging to the second boiler, by which the fire will be transferred from one to the other in full force without receiving the least check or loss of time. If at any time it should be found necessary to withdraw the fire at once from both boilers, it may be done by drawing up the slide B, and putting in both stoppers, when the fire will pass off by the chimney; or the fire might be extinguished instantly by putting down the cover, a means of saving much fuel, by putting an end to all further combustion. JAS. PEDDER.

Jan. 20, 1842.

In our last, we adverted to this apparatus for boiling food, and expressed our approbation in some respects, and hinted doubts in others. The arrangement, by which the heat may be applied to one or the other boiler, or altogether suspended, is excellent. The brick work for retaining the heat, we have no doubt, is also very advantageous. The great difficulty we had was, that it was contrary to our philosophy for heated air to descend; we have been so much accustomed to seeing smoke ascend, that we doubted whether it could be induced to go down through the fire for the purpose of being consumed. Yet we are told by Mr. Pedder that such is the fact, and practical men assure us, that when the opposing column of air is very high, as in the chimney to this furnace, that the heat will descend for the sake of ascending. We must confess we do not see the philosophy of the thing. But that is immaterial, the fact is so, and of course there is an explanation of it somewhere. The other difficulty we had was with respect to the ashes: unless they, like the smoke, are consumed in this all-devouring furnace, we imagined they would soon fill up the space below and choke the flues. If we understand the engraving, they can only be removed through the opening at top, after the fire is out. We feel so much interest in this contrivance, that we will be obliged to Mr. Pedder to inform us whether there is any validity in our objections, and also to furnish us with particular directions for building, as to thickness of brick work, height of chimney, and such other particulars as experience may have settled.

THE ORCHARD.

Mr. Randall, to whom was awarded the first premium for the best orchard, by the Massachusetts Agricultural Society, furnished an account of his management, of which the following is a synopsis:

"The extent of the orchard is three and a half acres; the number of trees, two hundred and twelve; their distance apart, twenty-five feet; and the number of varieties, fifty-seven. The soil is a sandy, gravelly loam, generally light. In planting the trees, Mr. Randall says the mutilated roots of each tree were carefully cut off smooth; even the small fibrous ones, and engrafting salve put over large cuts. The roots were immersed in water for above one-half hour before planting, thereby inducing the mould or loam to become attached to them. The hole was dug large, so that every root might extend without bending or being cramped. Nothing was put round the roots but surface earth, and that carefully worked in by hand, each root and fibre lying horizontally and naturally. No manure was used in setting. One bushel of fine stable manure was put round each tree the first of November, and repeated for two years. Mr. Randall preferred raising the earth around trees, when first planted, above the common level, to give them firmness, to planting deep. He prefers *spring* to *autumn* planting. Shallow planting he thinks succeeds best, and this, he thinks, may be accounted for philosophically. The roots are luxuriating in a good soil, and are more immediately under the influence of the sun.

"The orchard was planted in 1837, and the ground has been planted every year since, and including 1837, with potatoes, carrots, ruta baga, sugar beets, and mangel wurtzel. The manures used have been common stable, compost of stable, loam and swamp mud, lime compost, spent

ashes, plaster, and a small quantity of saltpetre. The trunks and lower limbs of the trees have been well washed with oil soap, sand and water, every spring and fall since they were planted out; after which a coat of oil soap has been put on with a painter's brush. The first pruning was done the first of May last, at which time the earth was removed from around every tree to examine for borers; not one was found, or any indication of one. In reply to the inquiries of the committee respecting the oil soap, Mr. Randall says, that from eight to ten pounds of oil soap are put into a common pail, with such a quantity of warm water as will render it about as thick as paint when mixed for use. With this pail of soap, thinned as described, a man having a small tin pail, or bag, or pocket, filled with fine sand, tied round his waist, with a coarse crash cloth and a paint brush, is ready for operating. He first wets his cloth with soap, then scatters on some dry sand, and gives the trunk and branches a good rubbing; after which, with a paint brush, he puts on a coat of the soap, prepared as above, equal to a thick coat of paint. It is well, he says, to select for this work the termination of a storm of rain, when the moss or any roughness on the bark, will yield more readily to rubbing."

MUSQUITE GRASS.

At a late meeting of the South Carolina Agricultural Society, the President read the following communication from Col. Wade Hampton, which was ordered to be entered on the minutes:

Columbia, Nov. 24, 1841.

Dear Sir,—The meeting of the State Agricultural Society affording a favorable opportunity for its distribution, I beg leave to place at your disposal, for that purpose, about two bushels of Musquite grass seed. This grass is a native of Texas, and as far as I am capable of forming an opinion by an experiment of a single year, is admirably adapted to our country. It has, I understand, been successfully cultivated by Mr. Carter of Alabama, for some years past, and the high estimate he placed on it, induced him very kindly to send me a few quarts of seed in the summer of 1840. These seed were planted in September following, in drills, came up with great regularity, and continued to vegetate during the whole winter. A drought of unusual duration in the spring, and another in July, accompanied by intense heat, produced no visible effect on it, and it has continued to flourish through all the vicissitudes of a most disastrous season. The seed were sown on dry alluvial soil, which had been prepared for turnips; and from a piece of ground not exceeding the fourth of an acre, I gathered fourteen bushels of seed. It will, I think, make fine hay, growing from two and a half to three feet high; and in its native prairies it forms the favorite pasture of the wild horses and buffalo.

Appreciating as I do, your uniting exertions in the great cause of agriculture, I offer no apology for the trouble I impose on you, in distributing the seed that accompanies this letter.

Very respectfully,
Your obedient servant,
W. Hampton.

One of the strongest arguments we know, in favor of a system of high cultivation, is this, that *experiments*, which are always made with the greatest pains, are almost invariably successful, producing astonishing results, whilst the same thing, under a more slovenly mode of husbandry, proves utterly worthless.

AMERICAN FARMING.

A correspondent of the Farmers' Cabinet, whose knowledge of European agriculture we have had occasion to notice frequently, in the last number of that invaluable work, undertakes to draw a comparison between the profits of English and American agriculture, greatly to the advantage of the latter.

He opposes their cheaper labor and greater skill with our freedom from taxes, cheapness of ground, and the adaptation of our soil and climate to the cultivation of Indian corn. The use of the horse-rake and cradle-scythe, not yet known in England, he esteems a heavy item in the account.

Upon the whole, he comes to the conclusion that the cultivation of the earth, the great and favorite interest of mighty England, offers more inducements to the capitalist here than there. We have no doubt of the correctness of his opinion.

SILK.

We have expressed the opinion, that the silk culture would, eventually, become a good business. We think there is a great deal of labor in the South, both black and white, peculiarly adapted to this pursuit. Cotton itself, "the great staple," a few years ago, presented a less favorable prospect than silk now does.

The following, amongst other reasons, are given by a writer in the Albany Cultivator, why the people of the United States should, at once, engage in the business of silk growing:

"1. Because silk forms the heaviest item in the catalogue of our importations.

"2. Because we possess the means of doing it to better advantage than any other nation.

"3. Because the necessary skill is easily acquired, and no nation ever possessed better talents to acquire it.

"4. Because the nation is under heavy embarrassments on account of excessive importations, and no other means are so sure of success in providing the necessary relief.

"5. Because it can be effectually engaged in by all classes of people, requiring little or no capital.

"6. Because we have more spare land than any other nation, and much well suited to the growth of the mulberry, which is worn out for other purposes.

"7. Because we are already well stocked with the mulberry trees, which will be lost to the nation if not used for that purpose.

"8. Because a stock of silk worms may be obtained the first year, equal to what could be reared of any other live stock in a great portion of a lifetime.

"9. Because raw silk or cocoons are always surer of a market than almost any other commodity.

"10. Because it is a very certain crop.

"11. Because a pound of silk, worth six dollars, can be grown in less time than a pound of wool, worth fifty cents.

"12. Because it will cost no more to transport a pound of silk to market, worth six dollars, than a pound of bread stuff or pork, worth six or eight cents.

"13. Because the labor of growing a crop of silk requires only six or seven weeks, while that of almost any farming crop requires more than as many months.

"14. Because most of the labor will be performed by women, children or invalids—who, though willing, are unable to perform other profitable labor.

"15. Because there are hundreds if not thousands of skilful silk manufacturers in the country, who are unable to find regular employment for want of raw silk.

"16. Because the growing and manufacture of silk has never failed to be a source of wealth to any nation which embarked in it."

For the Southern Planter.

HOGS.

Dear Sir,—As you desire it, I will state to you the conclusion to which my own limited experience has led me in regard to the best "Farm Hog" of the several breeds with which I am acquainted, not desiring however to be considered by any means as orthodox upon the subject. I have the Berkshires as you know, and good ones too; and I have other breeds—one of which, I think, is equalled by very few Berkshires, and which so far as I am capable of judging, is well worth the attention of Virginia Farmers. It is a large, handsome and thrifty white hog, reared by one of our Vice-Presidents, Mr. Thomas S. Dicken, from the Bedford, crossed with the Barnitz breed, so called, which last is a cross by that celebrated breeder, of the Chester county breed with the white Chinese. Mr. Dicken is a careful breeder and has devoted more attention and for a longer time to the improvement of his stock than any one known to me—and to borrow a familiar saying "it is hard to beat." But from his retiring habits and unpretending character, this stock is less known than it deserves to be. Crossed with the *best* Berkshires his pigs are equal to any and superior to most of that stock I have seen—and the best of them may be had for $5 instead of $10. You can judge for yourself how far the following facts sustain my opinion:

I have a sow of Mr. Dicken's stock which produced on the 7th March, 1840, her first litter 7 pigs—5 of which were very fine and 2 decidedly inferior. Four of the best were disposed of to friends, a fifth selected by another friend and kept for him until the fall, when having purchased some Berkshires he declined taking him. This pig was then altered and put up to fatten with the two inferior ones on the first day of November—the three having had until that time, only the ordinary farm treatment. They were killed the 8th day of December following, being 7 months and 1 day old, and weighed 127, 129 and 134 lbs., having been in the fattening pen but 1 month and 8 days.

The sow was then put to a Berkshire Boar and produced again 7 pigs—four of them perfectly white like herself—the other three, "tawny or reddish color spotted with black," which appears to have been the universal and distinctive color of the Berkshires 35 years ago. For one of these last, our President, the Rev. J. H. Turner, paid me $20, at 8 weeks old. I sold the four white ones for $30 and kept the other two spotted ones. That purchased by Mr. Turner though a very fine, is not near so large a hog as the white ones have proved to be; and both the spotted ones that I kept, turned out small hogs. The same sow has now a litter of 10 pigs by another Berkshire Boar—of which 7 are white like herself and 3 spotted, as before described. The *white* are decidedly the finest pigs, and superior in size and appearance to a litter of really fine full bred Berkshires by the same Boar, which are 20 days older.

Mr. Dicken has several brood sows of this stock superior to mine, as also one or more of the Skinner breed as it is called with us; tho' it is in reality the "Essex half black pig" of England. This too is an excellent cross with the Berkshire or any other good stock; though it is a smaller hog than the white, and has been

so intermixed with the common hog, that a genuine one is not often met with. It is remarkable, like the white stock of Mr. Dicken, for great thrift, aptitude to fatten, early maturity and great weight for its apparent size—all very important points with the Farmer. Mr. Dicken's white hogs, *without* the Berkshire cross and with the customary farm keep, well *as I know*, reach 234 lbs at somewhat less than 12 months old—and I have no doubt will, upon the same keep, at *any* age, weigh with the Berkshires. Its pork is peculiarly fine, "thin rind" and resembles precisely the beautiful white pork I have seen in the Philadelphia market. I do not say that this is a better hog than the *best* Berkshires—but I prefer it decidedly as a farm hog to a large majority of those I have seen; and crossed with *fine* males of that stock, Mr. Dicken's pigs will compare advantageously with any of them.—You remember no doubt, the white Boar exhibited by him at our first Fair last May, which was purchased by Dr. Lewis of Lawrenceville—If I am correctly informed, the Committee on Swine had no little difficulty in deciding the premium between him and the Boar President.

I believe that this stock, pigged in February and March, and treated as every farmer should keep his hogs, will attain as high weights by the usual killing time, as farmers generally desire—and that no farmer should keep his pork hogs through a winter. There are doubtless other good breeds in the State, which if properly attended to, especially by avoiding 'breeding in and in' as it is termed, and always selecting the best pigs as breeders, might save our farmers many dollars which now go northward to purchase they don't know what. The Berkshire is undoubtedly one of the finest hogs of the day and a superior cross upon any good stock—but few of them are so fine as to be worth $10 a pig,—there are superior and inferior of this, as of all other breeds—and I think you will concur in advising our farmers never to purchase a Berkshire unless he can first see it himself, or can have it selected by some competent and disinterested judge.

Mr. Turner in one of his essays suggests an excellent plan for propagating the Berkshires—that of procuring one male for a neighborhood; and it is but just to say of *his* stock, that *it* cannot be surpassed by all New York and New England together.

If an account of the different breeds of hogs which have been recommended to us, be of any interest to yourself or your readers, I refer you to an article on that subject in the Farmers' Register for October, 1840, chiefly compiled from printed accounts of them, to which is added an economical and successful plan of feeding hogs. I ought to apologise for the length of this article, which is greater than I could have desired.

Very resp'y, WM. H. RICHARDSON.

The following named gentlemen of the neighborhood have tried and prefer these hogs—Mr. Wm. Miller, Mr. Wm. Hill, Mr. W. W. Guy, Mr. Wm. D. Sims, Dr. Hopkins.

The above was written in consequence of a request on our part that the author would reduce to writing some opinions that he happened to express in our presence of the relative value of Berkshire and other hogs. We thought his opinions entitled to peculiar weight, because we knew that he had had a fair opportunity of judging, and because if he had been swayed by his interest his conclusions would have been opposite to the opinions he has expressed. Gen'l. Richardson has had opportunities of seeing the best stock in America, and we will venture to assert that no man in the Union is better informed on the history of the various breeds of hogs. He is himself a raiser and seller of Berkshire pigs—His stock was purchased at the highest price, and selected for him by Mr. Tucker, the Editor of the Cultivator—His sow is equal in point of form to any Berkshire we ever saw. It was then with such stock and under such circumstances, that he arrives at the conclusion, that for ordinary farm treatment, where no excessive pampering is resorted to on either side, that the white hog is equal to the Berkshire, and we have reason to believe that he as well as others *greatly* prefer the cross to either.

We know that we may expect a rating from some deeply interested in Berkshire stock for seeking the publication of any article to their disparagement; but we have no individual interests to subserve, and in procuring this communication we only sought to give to the public the evidence of a highly informed, most respectable, and impartial witness upon a subject of universal interest. Whether Berkshires are the best or the worst hogs in the world, is a matter to us individually of the most perfect indifference, and our columns are as open to the advocacy as to the denial of their claims.

RICE CEMENT.

This useful and elegant cement, which is beautifully white, and dries almost transparent, is made by mixing rice flour intimately with cold water, and then gently boiling it. Papers pasted together with this cement will sooner separate in their own substance than at the joining. It is, therefore, an excellent cement in the preparation of curious paper articles, as teatrays, Ladies' dressing and work boxes, and other ar-

ticles which require layers of paper to be cemented together. In every respect it is preferable to common paste made with wheat flour. It answers well for pasting into books the copies of writing taken off by copying machines on unsized silver paper. With this composition, made with a small quantity of water, that it may have a consistence similar to plastic clay, models, busts, statues, basso-relievos, and the like, may be formed. When dry, the articles made of it are susceptible of a high polish; they are also very durable.

FIRE-PROOF WOOD.

Doctor Fuehs, member of the Academy of Science at Munich, has discovered a composition by which he renders wood incombustible; the composition is made of granulated earth and an alkali. To obtain it the inventor says, you must dissolve some moist gravelly earth, which has been previously well washed, and cleared from any heterogeneous matter, in a solution of caustic alkali. This mixture has the property of not becoming decomposed by fire or water. When spread upon wood, it forms a vitreous coat, and is proof against the two elements.—The building committee of the royal theatre have twice publicly tried the composition on two small buildings of six or eight feet in length, and a proportionate height; the one was covered with the composition, and the other built in the usual manner. The fire was put equally in the two buildings; the one which was not covered with the composition was consumed, while the other remained perfect and entire. The cost of this process is very insignificant compared to its great utility, being about two francs three centimes per 100 square feet. The royal theatre at Munich has undergone this process, having about 400,000 square feet; the expense of which was about 4 or 5000 francs.

LIME.

Much as we have seen and heard about this substance, we were not aware that the properties claimed in the following article had been assigned to it. The communication is taken from the Farmers' Cabinet, and appears over a signature that we have often remarked accompanied some of the ablest productions in that excellent work. The author first alludes to the fatal disease that is now destroying so many of the cattle in England, which he thinks may be cured by the use of Lime. He quotes the first paragraph from an old No. of the American Farmer.

"Some years since I purchased a horse, but he had the appearance of laboring under disease; I commenced a course of treatment which I had before pursued in cases similar to appearance, but without effect; I was therefore induced to try the use of *lime*, as I was confident he was filled with botts, for he had discharged several; I therefore commenced by giving him a tablespoonful of slaked lime three times a week in bran mashes. After pursuing this course near two weeks, the botts began to pass away in quantities, varying from ten to twenty, which he would expel from his intestines during the night; in the meantime his appetite began to improve, and in six weeks he was one of the finest geldings I ever saw; from that day to this I have kept up the use of lime amongst my horses with decided benefit; and as an evidence of its good effects, I have not lost a horse since I began to use it. And lime is a certain preventive in keeping cattle from taking the murrain. As an evidence of this fact, I have used it among my cattle three times a week, mixed with salt, for three or four years, and in that time I have not lost a single animal by this disease; but in the meantime some of my neighbors have lost nearly all the cattle they owned. But I will give a stronger case than even the one above mentioned. One of my neighbors who lost all his cattle, had a friend living within two hundred yards of him, who had several cattle which ran daily with those that died, and his cattle all escaped—he informed me that he made it an invariable rule to give his cattle salt and lime *every morning*. I have, therefore, no doubt but salt and lime are a sure and infallible remedy for botts in horses and murrain in cattle."

And I am reminded of a circumstance by a friend, who has often before mentioned it; he had two fields of pasture near his house—on one of these he spread lime upon the turf to the amount of more than 200 bushels per acre, but as the other field lay immediately below his cattle-yard, from whence he had formed drains to carry the water over its surface in the most complete manner, he determined to let that suffice for a dressing; and the effect of the highly impregnated water from the yard was a growth of grass truly astonishing. Both fields were kept in pasture, and when the stock had eaten one of them down, they were removed to the other, and so changed regularly about; but the effect of the different crops on the appearance of the stock, horses and cattle, is not to be expressed, for while feeding on the limed land their coats were close, shining and healthy, and their spirits light and cheerful, even when they were compelled to labor hard to obtain a belly-full; but when turned into the watered grass, six inches or more in height, a difference for the worse could be perceived in 24 hours, and every day after they lost condition amidst the greatest abundance, with coats rough and staring, lax in the bowels and flaccid, with distended paunches,

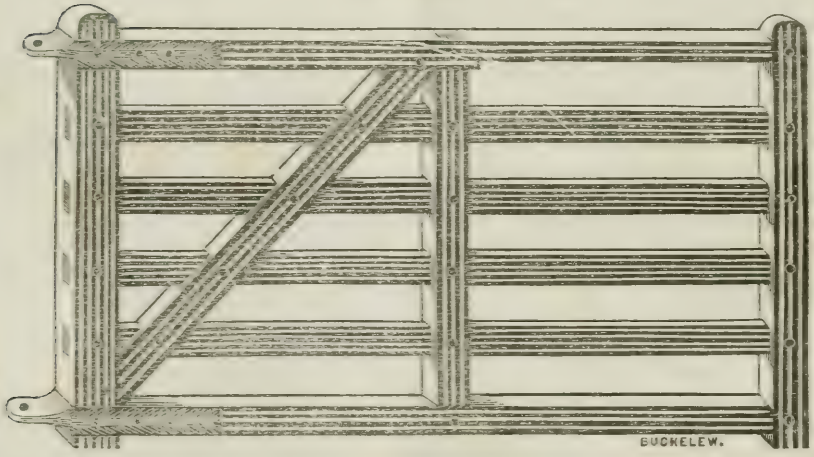
dejected countenances, and sluggish in their movements: they soon exhibited a depreciation in value to the amount of about half their former worth. But the transition to health and vigor and good looks was quite as sudden and apparent on a return to the limed land, for again in 24 hours, or by the time the food had passed through the system, a change, particularly in their air and carriage, was very perceptible.—My friend adds, he never had an instance of the murrain or botts while his stock fed on these pastures, but is satisfied he should have had both, but for the change to the limed land; for while feeding on the watered pasture, the stock had always the appearance of a predisposition to that state of derangement of the digestive system, by which he has no doubt these diseases are engendered.

In conclusion, I would ask, is it not quite fair to draw the following deduction from what has been said, namely, that all dairy pastures ought to be heavily limed, it being the most natural thing in the world to suppose that a proper secretion of milk, the best and most wholesome, depends very much on the nature of the food with which the animals are fed? and must not the butter from a cow that is in health and spirits be of better flavor, color and consistence, than that from one that is lax, washy and weak, from feeding on watery, acid and soft herbage? and will not this account for much of the disgustingly rancid, ill-flavored and ill-looking butter which we so often find in the market? My friend above quoted, and who is now at my elbow, answers "Yes; for while my cows fed on the watered meadow, the butter was scarcely eatable—white, soft and ill-flavored, but it was sweet, firm and fine flavored when they were confined to the limed land." Ergo, lime your pastures, and allow your stock as much salt as they will consume daily, for I am convinced that lime and salt are a remedy for "botts in horses," as well as the "murrain in cattle."

VIR.

For the Southern Planter.

GATE.



C. T. BOTTS:

SIR,—The reception of the January number of the Planter suggests to me that a new subscriber has something more to do in the way of patronage to your valuable paper than merely paying the subscription. Cash is no doubt indispensable to the support of the paper, but I am persuaded that *other* contributions of a plain, practical kind constituting, in the main, the value of an agricultural work, will be kindly greeted by the Editor.

I am a plain farmer, who thinks that fancy work, visionary speculations, and finely spun theories upon agricultural improvements, though woven with a delicate taste and practised hand into such a work as the Planter, contribute but little to its body and the value of its staple. What we farmers want are facts, the results of experiments with all the accompanying circumstances fairly stated, such as climate, soil, season, cultivation, &c. For an agricultural experiment failing or succeeding may have been reversed under different circumstances. We should not become converts to a successful experiment, promulgate it as a general truth, and urge our agricultural brethren to adopt it implicitly without giving them all the facts and truths connected with it. Nor should we discard an abortive ex-

periment, and counsel others so to do, merely because we have failed. This remark is directed particularly to the cultivation of land. What will succeed or fail on one farm, will often have a different result on the next. The same remark holds good in relation to the same farm—one field differing from another by sudden transitions of soil—one field has gravel, the next is spungy—one is sandy, the next argillaceous. In fact, the soil of parts of the same field differs entirely in character, and requires totally different treatment, and often the application of different kinds of compost. No reliance, then, can be placed upon the result of an agricultural experiment, unless the experimenter will give, as remarked above, all the facts connected with the experiment. This is too much neglected in contributions to agricultural works, and its importance cannot be too forcibly impressed upon your contributors. When a lawyer is applied to for advice, he instantly demands the facts; the physician when consulted, must know the symptoms, and when farmers are to make up a judgment in relation to an agricultural experiment, their minds should be enlightened by every thing connected therewith.

When I took up my pen, Mr. Editor, it was for the purpose of giving you the plan of a gate I have in use upon my farm, and which has been adopted, I may say, universally through this section of the country.

The drawing represents the frame work of the gate. It is made of hard pine or poplar, ash, cedar or white oak.

The postern upright is 4 by 3 inches or 5 by 3 inches, according to fancy.

The brace is 4 by 3 inches.

The top railing is 4 by 3 inches until it passes the middle upright, then 3 by 3.

The middle upright is 4 by 3 inches, to keep the slats true and in place.

The front upright is 4 by 3 inches.

The bottom railing is 3 by 3 inches. This is sometimes a slat.

The top and bottom hinge. This is a clasp hinge, embracing the back upright and the top and bottom railing, securing the tenons from ever breaking, and having the shank of the bottom one longer than that of the top one, so as to give a fall to the gate. This is the hinge I prefer—others may differ from me, but this does not affect the gate, as it is adapted to any kind of hinge. If the maker thinks proper, he can extend the back upright and let it work in a socket at bottom and ring at top fastened to the post.

I think, Mr. Editor, you will perceive that all the requisites of a good gate are combined in this plan. When properly made, the timbers in front are lighter than those back. The slats are all kept in place by the middle upright and brace, without the possibility of being warped by the sun. There are no nails, every part being pinned together, and can be made by any one in the least accustomed to common plantation tools. But the most important of all, we have here a brace, which resting with one end upon the back upright and the other supporting the top railing, which in its turn supports all other parts of the gate, prevents the possibility of swagging. The brace is the most important part of a gate, and its *position* most important of all. Some gates have no brace—many are braced by two slats pinned together which soon become racked and serve no good purpose. In others, again, (such as that of your correspondent J. B. so much lauded by you,) the brace is permitted to rest upon the bottom railing. This is worse than no brace, as it throws the whole weight of the gate, with that of the brace superadded, upon the tenons. Plant your brace upon the back upright, and the gate never swags.

I have thought every one who advises a particular construction of a gate or farming implement, should send a model of it, and if it meet with your views, I will send one of the plan above, and also a model of any implement I may recommend to my farming brethren, and hope that they will do the same, as a room in your establishment well filled with models of agricultural implements, such as have met the approbation of judicious farmers, might afford amusement and instruction to many of us visiting the city for various purposes.

Very respectfully, &c.

G. A. S.

We thought we had nearly exhausted the subject of gates in our first volume, nor do we see that this has any advantage over the *corrected* one of J. B. therein described. Nevertheless, as it is upon the same principle, in the main, and as many of the subscribers to the present volume have never seen the first, we have determined to insert it, accompanied with an engraving. If our correspondent will look again, he will find, that the gate "so much lauded," has the brace placed as his is, and as it should undoubtedly be. The defect in the original was specially noticed and corrected in a subsequent engraving. We prefer the dovetail joint to the mortice and tenon. There are great varieties of gates, and almost every man has a fancy of his own. The chief points to be observed are, as our correspondent hints, the proper position of the brace, the lightening in front, and security in hinging.

Mr. Smith (we despise initials) is, we understand, an able and experienced farmer. We entirely concur with him in the necessity of particularity in the detail of experiments, and the

impropriety of deducing general conclusions from a single fact.

With respect to the last suggestion of our correspondent, we esteem it a very happy one. We have long thought that our office might be converted into a very interesting agricultural museum. We have already made some small collections, and shall be much obliged to our friends, who will forward us any thing, in the agricultural line, either curious or useful.

STRAW.

How can I make my cattle eat straw? I have often asked of some experienced farmers. "Give them less hay," was the general reply. Not liking this mode however, and knowing that good farmers in England and this country made free use of straw as food for cattle, I resolved last summer, when thrashing, to change my plan. I stacked it as usual, but in the progress of the work, sprinkled on from two to three bushels of salt. I used the "Pitts Thrasher," which gave me the additional advantage of mixing the chaff through the whole. Well, during the warm weather in the first part of this month, my cattle, instead of wandering about with but little appetite, might be seen any day eagerly engaged in filling themselves with straw. At night, when the cows were tied up to receive their roots, their hay would be almost untouched. Their round appearance left me no apprehension of their starving, however. This was continued until nearly the present time, when I was obliged to reserve the remainder of the stack for the use of the stables. Nearly a month's feeding of hay was saved.—*New Genesee Farmer.*

SEEDS.

We are indebted to the kindness of the Representative from this Congressional District for another supply of seeds from the Patent Office. These seeds, it will be remembered, are collected with great pains, through foreign and domestic agents, by the indefatigable Commissioner of Patents, and annually distributed through the members of Congress. Many of them are new varieties, and likely to prove exceedingly valuable. Amongst the varieties of corn, we notice the Dutton, the Baden, and Brown; also several varieties of beans and turnips, introduced from England by the Hon. Daniel Webster, intended chiefly for field culture.

We are requested by our Representative to distribute them amongst *his* and *our* constituents. A liberal construction of this clause will, we apprehend, justify us in going a little beyond the territorial limits of his District; so that our more distant friends, by early application, may come in for a share.

A very few seeds of each variety are sent, and a division amongst the numerous applicants will frequently allow only one or two to each. One condition we shall take the liberty of imposing in every instance, viz: that, if the variety prove valuable, double the number of seed received this year, shall be furnished to this office, for distribution, next spring.

PAINTING HOUSES.

It has long been a subject of inquiry as to the best time to apply paint to the clapboards of houses for durability. Repeated experiments have been made, within twenty-five years past, which have resulted in the convictions, that paint applied between November and March, will stand more than twice as long as that which is spread in the warmest weather. The reason is obvious; for in cold weather the oil and the component parts of the paint, form a hard substance on the surface of the clapboard, nearly as hard as glass, and not easily erased or even cut with a sharp knife and will not soon wear off; whereas paints applied in the months of July and August, and more especially if in a severe drought, the oil immediately penetrates into the wood like water into a sponge, which leaves the lead *nearly dry* which will soon crumble off.

Whig & Courier.

From Mr. Colman's Agricultural Report.

WEST CAMBRIDGE PIGGERY.

"A very large hog establishment," &c.

A very large hog establishment in this county is to be found in West Cambridge, on the farm of Abner Pierce. He keeps in his enclosure about five hundred hogs. They are supported upon the city swill or refuse. No hogs are allowed to be kept in Boston but by special and extraordinary permission: and among the excellent municipal regulations, the refuse vegetables, meat, garbage, and offal of the houses are required to be kept by each householder in a box or barrel which is emptied once a week or oftener by the city scavengers. This being taken into the covered city carts, is delivered at Mr. Pierce's establishment, about five miles from the city, daily—he paying therefor to the city four thousand dollars per year on a contract for five years.

His hogs, when I visited them, were in an enclosure of about fourteen acres, partly covered with trees and bordering on one of the beautiful ponds in that vicinity—a picturesque situation most certainly, for animals making such humble

pretensions to taste and sentiment. If nothing else, however, in the summer months they enjoy, as much as their betters, the luxury of a refreshing bath and quiet repose under the shade, both essentially conducive to their health and thrift. He has had no general disease among them, though occasionally a case of the "blind staggers." He considers this troublesome disease as proceeding wholly from indigestion; and he finds no difficulty in its cure, by procuring an immediate evacuation. For this purpose he gives a dose consisting of half a pint of lamp oil, and half a pint of molasses, strongly charged with pounded brimstone. This remedy is important to be known, as the disease is not uncommon among swine, and often proves fatal. This disease can hardly be considered local, though the "blind staggers" in years gone by, has been known to prevail in some localities near at least one of these ponds among a class of animals, who assume to be of a higher rank, but who occasionally pollute these beautiful regions by a resort to them for purposes of dissipation; but a simple and perfect preventive is at last found for *this* disease, (so much more humiliating and dreadful in its effects on *them*) if they can be induced to take it, in "total abstinence."

Mr. Pierce's hogs are purchased; he raises none. He buys them at a weight of 100 to 150 pounds. Their average weight when killed is from 250 to 300 pounds. He has a killing twice a year, though many of his hogs are kept a year. The supply of refuse from the city is sufficient, excepting at certain seasons of the year, when some meal and corn are given. They fatten in the yard without extra feed, excepting as above. At killing, the skins (that is, the small entrails) are sold at ten cents a set; the harslet at eight cents; which pay fully the expenses of dressing. The remainder is cooked for the swine, after saving and selling what can be used by the soap-maker. The manure made in their beds where they are littered is sold readily at four dollars per cord, and in quick demand. The average sales of manure are not less than one thousand dollars.

In the enclosure there are extensive plank platforms on which the garbage is spread when brought from the city. The right of cleaning the tables, after the hogs have filled themselves, is purchased by several neighboring farmers at two dollars and fifty cents per day. Much of the refuse thus obtained is spread upon their grass lands, or ploughed in on their cultivated grounds, or placed round their apple trees, and in every case with the greatest advantage. If not used immediately it is put into a compost heap and covered with mould. Some farmers who obtain it use much of it for feeding their own swine. One farmer stated to me that he had purchased the right of obtaining it two days in a week. He kept the last year fourteen hogs entirely upon those gleanings. The gain upon these hogs in live weight from 1st October to 1st April, when he sold them on foot, was 2,800 pounds. Other farmers have been equally successful in this economical process.

The average gain of the hogs at this establishment is rated at a pound per day, live weight. A large amount of bones are brought out in the carts, and these find a ready sale at the bone-mill for manure.

CURE FOR TOOTHACHE.

Mix alum and common salt in equal quantities, finely pulverized. Then wet some cotton, large enough to fill the cavity, which cover with the salt and alum and apply it. We have the authority of those who have tested it, to say it will prove a perfect remedy.

Union Agriculturist.

For the Southern Planter.

HOMONY MORTAR.

Having occasion for a new homony mortar a short time past, with two of my men and a cross-cut saw, we cut off a hollow gum log of suitable size, three feet four inches long; took it home, trimmed out the inside with a long-handled chissel, then drove down into the hollow a piece of hard oak two feet long, which being forced to the bottom and secured by an inch pin driven into an auger-hole bored about one foot from the lower end, left a mortar about one foot four inches deep. This was smoothed with a cooper's shave, and in two hours the mortar was ready for use, without the expense of hoop or bolts, which is worth our consideration these hard times. S.

We make the following extracts from a most able report of a committee, appointed by the Agricultural Society of Pendleton, in South Carolina:

ON THE CAUSES OF THE DEPRECIATION OF LAND, AND THE REMEDY.

In every good system of culture, the earth must be allowed sufficient time to recruit her exhausted energy in producing a crop, by *rest*; or must be aided in re-invigorating herself by *meliorating crops*, or by means of stimulating *manures*. Rest will accomplish a great deal towards resuscitation, provided it is resorted to in time, before the land has become too much exhausted. It must be assisted, however, by turning in, at the proper season, the natural productions, for the purpose of converting them into manure, and of keeping the surface soil well pulverized for attracting and combining atmospheric manure. The proper time for performing this operation, is when the vegetable substance

has arrived at full maturity, when it has reached nearest its woody state. The controversy so long carried on, whether *green* or *dry* vegetable matter is the proper state to turn under, is now, we conceive, pretty well settled by the good sense and intelligence of agriculturists. Green substances are too evanescent in their quality to add to the permanent fertility of the soil. They are little better than a shower of rain—the benefit of which is soon evaporated. The value of manures depends upon their permanent and durable quality of enriching the soil, and therefore vegetable substances in a green and succulent state are little to be relied on, and will not repay the labor of converting them. We do not see plants while growing shedding their green leaves and returning them to the earth for the purpose of being converted into soil. Hence, Nature, who is wise in all her operations, furnishes a valuable guide and direction on this important subject. We should improve from her hints, and follow, instead of depart from her example.

It is a great mistake to turn land out to rest and suffer it to become close and compact. Land will not improve in that condition, because the pores (if we may so speak,) are closed, and the healthy action of the soil and its capacity for re-production is obstructed. The great secret in the formation of soil or its improvement, *is the re-conversion of its products by decomposition into an increased capacity of the earth to produce.* Plants feed upon each other—the parent stem dies and gives vigor and growth to its offspring. This vegetable *cannibalism* (if we may so term it,) clothes our fields with verdure and feeds us with the rich variety of earth's productions, and it is an important principle in the science of agriculture. Feed the earth liberally in order that she may feed us bountifully, and in proportion as proper aliment is given her, will she repay the bounty. She cannot yield us the milk of her bosom, or supply the cravings of our boundless appetites, unless she is liberally supplied with the means of doing it. "Muzzle not the ox that treadeth out the corn," is a divine command; and also the command of the great God of nature is, muzzle not the earth that gives us food and raiment.

The report alludes with great force to the expense of making and hauling out manures and compost, and considers the system, however applicable it may be to very small farms, as impracticable and insufficient to restore the vast tracts of worn out soil that are cultivated in the South. Circumstances compel us, at any rate, induce us, to cultivate more land than can be renovated by this laborious and expensive mode of improvement. Whilst, therefore, the Committee esteem very highly the manure that is made *incidentlally*, they think that the labor, that is required to manufacture and spread it, can be much more profitably employed in cultivating and ploughing in green crops.

We have heretofore expressed our conviction of the folly of hauling in vegetable matter for the purpose of hauling it out again. We do not believe that the cost of *distant* hauling has ever been fairly estimated. The current of opinion in favor of this compost system has been produced by the effect of northern example. The circumstances are totally different. Northern farms are, in size, more like gardens; the distance for hauling infinitely less, and the crop susceptible of higher and more expensive cultivation. The question may be raised whether we too had not better work less land and cultivate it more highly. That is another matter, but what we mean to maintain is, that although the system of improving by *making* composts may be the best for a small farm, cultivated like a garden, we think, with the South Carolina Committee, that we must look to some other source for extensive improvement. Do not let us be understood as underrating the value of stable manure or other fertilizing matter. On the contrary, we believe, and have said so before, that one of the greatest points of good husbandry, consists in gathering up and carefully saving all kinds of animal and vegetable offal, that can be collected about the yard, stables and farm pen.

But whether the labor of increasing this pile by artificial means, can be better bestowed in assisting the earth to the production of vegetable matter, for her own consumption, is a subject of calculation. We entertain very little doubt of the fact. We differ in this slight particular, however, with the Committee. When they would plough in the crop, we would cut it, and suffer it to lie on the surface, as a "cover," during the summer months at least; ploughing in that and the sod it had nourished, for the next seeding.

A VALUABLE TABLE.

The following valuable table was calculated by James M. Garnett, Esq. of Essex County, Va., and first published in Mr. Ruffin's Farmer's Register:

Table.—A box 24 inches by 16 inches square and 28 inches deep, will contain a barrel, or 10,752 cubic inches.

A box 24 by 16 inches square and 14 inches

deep, will contain a half barrel, or 5,376 cubic inches.

A box 16 inches by 16 8-10 inches square, and 8 inches deep, will contain a bushel, or 2,150 4-10 cubic inches.

A box 12 by 11 2-10 inches square and 8 inches deep, will contain half a bushel, or 1,075 2-10 cubic inches.

A box 8 inches by 8 4-10 inches square and 8 inches deep, will contain one peck, or 537 6-10 cubic inches.

A box 8 inches square and 4 2-10 inches deep, will contain one-half peck, or 263 8-10 cubic inches.

A box 8 inches square and 4 8-10 inches deep, will contain half a gallon, or 131 4-10 cubic inches.

A box 4 inches square and 4 2-10 inches deep, will contain one quart, or 67 2-10 cubic inches.

These measures come within a small fraction of a cubic inch of being perfectly accurate, as near indeed as any measures of capacity have ever yet been made for common use; the difficulty of making them with absolute exactness has never yet been overcome.

CURE FOR WARTS.

In our paper of January 8th we published a recipe for curing warts. Mr. H. M. Sanborn, of Brookline, called on us the other day to say that he had cured all the warts on the hands of his son, by the use of the means therein recommended. That is, he scraped a *carrot* and salted the scrapings for a poultice, which he bound on the boy's hands on his retiring to rest. This was several nights repeated.

Massachusetts Ploughman.

TOBACCO.

Mr. Joshua Dodge, who was appointed by the Government special agent to attend to the interests of the United States in Europe, has addressed a circular to the Tobacco Planters of this country. The object of this circular is to urge upon our Planters continued and strenuous efforts to force a reduction of the high duties laid on Tobacco by the governments of Europe. This, Mr. Dodge says, can and should be effected by retaliating upon European goods that are imported into this country free of duty. Mr. Dodge says that the annual average exportations of our Tobacco to Europe amounts to 97,651 hogsheads—11,000 of which are smuggled. The balance pays a duty of about $35,000,000, six times as much as is received for it by the producer. Mr. Dodge now reckons that if the duty was taken off, the consumption in Europe would be increased eight fold.

This is about the amount of the circular. To increase our Tobacco market is certainly a great desideratum to the Planter of the South and and West. We undoubtedly possess a capability of producing much more than we can sell; but whether the Planter, who is suffering for a market for his product, can better his condition by increasing the cost of the articles he consumes, is another question. But suppose the *threat* of an American tariff should produce a reduction of European duties, does not Mr. Dodge greatly overrate the increase of European consumption? His estimate is founded upon the supposition that *two* men in Europe will consume as much tobacco as *one* in the United States. Now is it possible that there are half as many, or a fourth as many, of the starving population of Europe, that, under any circumstances, could afford to purchase this luxury, as of the well paid independent laborers of the U. States? We cannot but think that a man would buy wholesome food for his family, before he would incur the expense of acquiring a taste for tobacco.

Mr. Dodge's statistics are, we fear, imperfect, and his deductions much exaggerated. With respect to Tobacco Coventions and national interference, we know that many of our soundest and most experienced tobacco dealers think such measures more likely to result in harm than good. We ourselves are not sufficiently acquainted with the *facts* to form an opinion.

TRANSPLANTING PEAS AND EARLY VEGETABLES.

The method of rearing peas in pots or boxes in hot-beds or hot-houses, and afterwards transplanting them into the open ground, is a common practice, and often succeeds well; but I would recommend a method not so well known but far preferable to that of pots and boxes, especially when they are to be raised on a hot-bed. This consists in having a quantity of turf cut into strips, say ten inches long and three inches wide, placing them in a close and regular manner over the surface of the whole bed, grass-side downwards. A row of peas, &c. is sown on each row of turf and afterwards covered with rich earth. When they are fit for transplanting, nothing more is required than to lift up the turf piece by piece, with the peas, &c. growing upon it, and place them where they are to produce their crop. By this means, the roots receive no

injury, nor do the plants sustain the least ch- in transplanting. This method may be adopted with similar success in the raising of potatoes, beans, &c.—*N. Y. Farmer.*

CORN HAY.

The Hon. H. L. Ellsworth, Commissioner of Patents, who, in his official as well as private capacity, omits no opportunity of advancing the interests of Agriculture, has reported to the American Farmer the result of an experiment made by sowing corn broadcast. It was cut when tasselled, and produced at the rate of 108½ tons of green fodder to the acre. A second crop, two thirds as great, was easily obtained from the same land, during the same season. Mr. Ellsworth guards the experimenter against the error of curing the stalks with the large end resting on the earth, through which moisture would be absorbed.

This is undoubtedly a prodigious yield in weight of even green hay, and we know that corn stalks contain a great deal of saccharine matter; but we imagine few things would lose more in curing than corn stalks, and we confess we see no data from which to conclude, that the actual nutriment from this crop was greater than would have been furnished by a growth of clover.

TRANSFORMATION OF WHEAT.

A grain of wheat when put into the ground at the depth of three inches, undergoes the following transformation: As soon as the farinaceous matter which involved the frame of the young plant contained within it is softened into a milky state, a germ is pushed out, and at the bottom of that germ small roots soon follow; the roots are gathering while the germ, by the aid of the milky fluid, is shooting upward; and when the milk is exhausted, the roots are in activity, and are collecting nourishment for the plant from the soil itself. This is analagous to the weaning of the young of animals, which are not abandoned by the mother till they can provide for themselves. But the care of nature does not end here; when the germ has fairly got above the surface, and become a plant, *a set of upper roots* are thrown out, close to the surface of the ground, which search all the superficial parts of the soil with the same activity as the under roots search the lower parts; and that part of the germ which separates the two sets of roots is now become a channel, through which the lower roots supply the plant with the nourishment they have collected.

EXPERIMENTS.

In a late No. of the Farmers' Register, Mr. E. Ruffin, Jr. details a series of experiments, of which the following are the results.

His soil is described as a light loam on a sandy subsoil, originally very poor, but improved by means of marl and manure.

Plaster of Paris, sowed in March on clover of the second year's growth, produced no visible effect. A dressing of James River green sand (not calcareous) 40 bushels to the acre, attended with the same result.

The following important experiment going to shew the value of top-dressing and "covering" we give in the words of Mr. Ruffin.

Top-dressing with farm yard manure, and with unprepared leaves. Eighteen acres of light sandy loam in clover of second year, very thin and very unpromising, was top-dressed in April, 1840, with rough and unrotted manure from the farm-pen, at the rate of 800 to 1000 bushels per acre. This land was marled in 1821, and though greatly improved (for before its product was 8 to 10 bushels in corn, and perhaps 3 in wheat,) was still but of middling product, and before this manuring, would not have brought more than 18 or at most 20 bushels of corn per acre, or six bushels of wheat after corn. The last crop of wheat, cut in 1839, after corn, was known to be only 42 bushels of wheat or 2½ bushels to the acre. That crop however was very much damaged by chinch bug. The top-dressing was as coarse as any trodden litter could be, many corn stalks merely mashed, but unbroken, constituting an average of the manure of the farm-pen, which was made of the stalks and straw of the farm pen trampled by the cattle, and covered over with the manure of the stables and hog pens every time they were cleaned out throughout the winter, which was about once a week. The hog-pens were principally littered with leaves from the woods. The effect of the top-dressing on the clover was almost immediately perceptible. In September the field was fallowed for wheat, and in June of this year 283 bushels of wheat, were cut from it, equal to 16 bushels per acre. The soil is decidedly a corn soil, and too light for wheat. But the most striking and gratifying proof of improvement is the frequent appearance of green-sward in many places, where it was not at all observed prior to this manuring. This valuable grass has generally made its appearance in spots of the different fields after marling, but this particular field was too poor for its growth (so as to be noticed) even after marling, until it received this top-dressing.

In January, 1840, about 15 acres of light loam, with sandy subsoil, in clover of second

year's growth, top-dressed with 377 very large ox-cart loads of leaves, principally pine-beards raked together in adjoining woods. The covering was so thick that at one time it was thought that the clover was in great danger of being smothered. It however came through and was decidedly benefitted, except in spots where the leaves were left too thick. In the fall, the whole was fallowed for wheat. Crop 15 bushels per acre, and considered a good yield for the land. Its product after corn has usually been about 8. Part of this land was much infested with wire-grass. In getting in the wheat no means were adopted to get rid of the wire-grass, except to pick up and carry off the little that the harrows brought to the surface. And in fact this piece received one harrowing less than I usually gave to such wire-grass spots, on account of a rain which interrupted the operations. This fall, 1841, in ploughing for corn, noticed that very little wire-grass was left. Could the leaves have had any agency in killing the wire grass, by shading or otherwise? Or did the mere exposure of the roots to the sun, as some maintain, effect it? Some credit is no doubt due to the latter cause, but the former has a strong, and, may be, a stronger claim; for, in similar spots, fallowed without any application of leaves, I have never known a similar decrease of wire-grass. It may be well to mention that the above 15 acres were 10 or 12 years ago well marled—the soil, originally and previously to marling, acid.

Leaves ploughed under. In January, 1841, covered a stiff, intractable soil, previously and some years ago well marled, with leaves, which were ploughed under, and oats sown early in March. No benefit to the oats whatever; and when ploughing the land for wheat this fall, the leaves were turned up very little decayed.

Old seed wheat, carefully preserved, compared with new, was found to be longer in generating, and the product presenting an inferior appearance.

MANURES.

In answer to some inquiries of a correspondent, the Editor of the American Farmer gives the following advice.

1. As to the quantity of each kind of manure necessary to act benefically. On *clays* not exhausted, where lime may be necessary, a hundred bushels to the acre should be applied.

On *clays*, whose fertility may have been exhausted by over-cropping, or from any other cause—or which may never have been fertile—from 40 to 50 bushels to the acre will be found to be enough for the first application, a dose of the same quantity to be repeated, after such land may have been carried through a course of rotation of crops.

2. On *loams* in good heart, a hundred bushels of lime may be applied not only in safety, but with decided advantage.

On *exhausted loams*, from 40 to 50 bushels to the acre is enough; to be repeated as above directed for infertile clays.

3. On *sands and gravels* we think that 50 bushels is enough lime to the acre; to be repeated under the same circumstances as above.

4. Of barn-yard or stable manure, or composts, whether to be applied to clays, loams, gravels or sands, it is our opinion, that less than 20 double horse cart loads, of the capacity of 40 bushels each, should not be applied. To be sure, from 10 to 14 would *tell;* but then, we question much, whether one acre with 20 loads, would not produce as much as two manured with half that quantity to the acre. If so, economy would suggest the propriety of giving the larger dose, because, half the labor would be thus saved.

5. On all lands which naturally lay dry, or which have been made so, planted in corn, or set to clover, we would sow a bushel of plaster to the acre.

[*Thirdly.* Mode of applying the different kinds of manure.]

1. *Lime* and *Plaster* should be sown on the surface.

2. *Barn-yard*, *stable* and *compost* manures, should be spread broadcast, and ploughed in to the depth of three inches, in stiff lands, and say four inches in light soils.

This, however, is a disputable question, and the opinion seems to be gaining strength and friends, that all such manures will prove most beneficial when applied as a top-dressing. This opinion is entertained by gentlemen of great experience and judgment; but we deem it due to candor to say, that we have not yet seen any thing in the way of experiments, to shake our belief in the opposite opinion. If the food of plants is, in part, received in a gaseous form, and we believe it is, much of this portion of their sustenance will escape, if the manure be left on the surface, subject to the drying of the sun and atmosphere, nor will a little of its virtues be washed away, and consequently lost by the rains. But as we are open to conviction we shall hold ourself prepared to profit by the lights of others.

While on the subject of manures we may say a few words upon *Marl.* This manure may be used according to its quality and the character of the land upon which it may be placed, in quantities varying from 40 to 60 double horse cart loads to the acre. The heavier kinds, clay or stone, we should presume to be best adapted to light soils: the shell marl, to tenacious soils. On these, besides the benefit arising from the lime which they contain, such soils would be greatly improved in texture. Where, however,

the shell marl may not be procurable, the others should be used, no matter what the character of the land, as its condition would be immensely meliorated by the calcareous principle contained therein.

BUTTER.

At a recent exhibition of the New York Agricultural Society, the butter exhibited for premium amounted to 2600 lbs. The three premiums of $30, $20, and $10, were severally awarded to Messrs. Lansing, Merrifield, and Lyon. These gentlemen each furnished statements of his mode of management.

Mr. LANSING's statement was as follows:

1. The number of cows kept is ten.

2. Keep them stabled through the inclement season; feed them from three to four times per day with good hay or green stalks; when near coming in, add some oats, barley, or corn cracked. In summer, good pasture, with living water accessible at all times, and plenty of salt.

3. Treatment of milk and cream before churning. Strain the milk in tin pans; place them in a cool cellar for the cream to rise. When sufficiently risen, separate the cream from the milk; put it in stone jars, well prepared, before churning.

4. The mode of churning in summer.—Rinse the churn with cold water; then turn in the cream, and add to each jar of cream put in churn full one-fourth of the same quantity of cold water. The churn used is a patent one, moved by hand with a crank, having paddles attached, and so constructed as to warm the milk, if too cold, with hot water, without mixing them together. The milk and cream receive the same treatment in winter as in summer; and in churning, use hot instead of cold water, if necessary.*

5. The method of freeing the butter from the milk, is to wash the butter with cold water till it shows no color of the milk, by the use of a ladle.

6. Salting of the butter.—Use the best kind of Liverpool sack salt; the quantity varies according to the state in which the butter is taken from the churn—if soft, more, if hard, less, always taking the taste for the surest guide. Add no saltpetre nor other substances †

7. The best time for churning is the morning, in hot weather, and to keep the butter cool till put down.

8. The best mode of preserving butter in and through the summer and winter, is as follows: The vessel is a stone jar, clean and sweet.* The mode of putting it down is to put in a churning of butter, and put on strong brine; let it remain on till the next churning is ready to put down, and so on till the jar is filled; then cover it over with fine salt, the same to remain on till used.

JACOB T. LANSING.

Watervliet, Jun. 1842.

* In winter, Mr. MERRIFIELD lets his milk stand twelve hours; it is then removed to the stove, and scalded over a slow fire to near boiling heat; the pans removed to the cellar to cool; the cream only churned. The butter, placed in the coldest part of the house, will keep good for any length of time.

† Mr. MERRIFIELD also uses Liverpool sack salt, one ounce to the pound.

Mr. LYON has a cellar under his milk house the entire size of the building, with wall of stone to the depth of six feet. In the centre of the floor, he has a hole about three feet square, over which he has a table, where, in summer, the milk is strained, the butter worked, &c. Mr. Lyon is very particular in salting his cows, regularly, once a week in winter, and twice a week in summer. It is not only conducive to health, but he says he has never known a case of great difficulty in obtaining butter, where the cows were regularly salted.

* Messrs. MERRIFIELD and LYON both prefer wooden vessels for keeping butter.

REBELLIOUS HENS.

A neighbor of our's states that hog's lard is the best thing he can find to mix with the dough he gives to his hens. He says one cut of this fat, as large as a walnut, will set a hen to laying immediately after she has been broken up from her setting; and thus his hens lay thro' the whole winter. Will some more experimenters try the virtue of hog's lard?—*Mass. Ploughman.*

RAW POTATOES BETTER THAN COOKED.

Mr. Holmes:—A. B. a farmer, had four pigs of the same litter, of course of the same breed, very near of a size and flesh on the first day of December. He then placed two of them in a pen marked A. the other two in a similar one marked B. both of equal dimensions, warmth, &c. &c. To those in pen marked A. he gave a peck of raw potatoes per day—those in pen marked B. he gave precisely as many by measure well boiled. Those that eat the uncooked ones did pretty well, or kept in tolerable order for store swine, the object being not to fat either, but only to carry them to the first of March, three months in common order. But those that eat the cooked ones grew daily poor, and before March come, must have perished by starvation had not the quantity been increased. The reason is plain, those boiled passed out of the system soon, while the others continued longer. S.

NOTE.—The above is from a very respectable source, and we publish it because it comes well vouched. But we doubt the *cause*. There

must have been some other cause than the one alleged by our correspondent. We are decidedly in favor of cooking potatoes, when it can be conveniently done, and given warm to swine.

Editor Maine Farmer.

AGRICULTURAL SOCIETY OF THE U. STATES.

On the 15th day of December, 1841, a meeting was held in the Capitol, at Washington, for the purpose of organizing a grand National Society of Agriculture.

The Hon. James M. Garnett, of Virginia, was chosen President, and a Committee, appointed for the purpose, reported a Constitution, of which the following are the principal features:

"Article 1. This Society shall consist of such members as shall, at the formation of the same, sign the Constitution, and pay to the Treasurer two dollars, and one dollar annually thereafter as long as they shall continue members.

"Article 2. Any citizen of the United States may become a member of this Society by paying the fees required for membership.

"Article 3. Any agricultural society in the United States shall become an auxiliary society upon paying to the Treasurer the sum of ten dollars, upon application, and five dollars annually thereafter; and each auxiliary society shall receive no less than five printed copies of the annual proceedings of this Society, and shall also be represented by such delegate or delegates as they may appoint to the annual meetings of this Society, and on all questions to be decided by the Society, such delegation shall be entitled to ten votes.

"Article 4. Any person paying to the Treasurer ten dollars, shall receive a diploma of membership for life.

"Article 5. The officers of this Society shall consist of one President, one Vice President from each State and Territory, and one from District of Columbia, a Recording Secretary, a Corresponding Secretary and Treasurer, and a Board of Control, consisting of five members, three of whom shall constitute a quorum.

"Article 10. The Board of Control shall consist of five members, living in, or at convenient distance from this city, who shall perform all the executive duties necessary to the purposes of the Society, not specifically assigned to other officers. They shall avail themselves of all the means in their power to become acquainted with the agriculture of foreign countries, and through such aid as they may be able to receive from our diplomatic agents abroad, as well as our consuls, shall, if consistent with the pecuniary means of the Society, introduce from abroad whatever they may think materially calculated to improve the agriculture of this country, whether it consists of information as to new and improved modes of culture, seeds, plants, additional articles of cultivation, agricultural implements, or domestic animals; the disposition of which shall be made at the first annual meeting of the Society.

"Article 11. The Board of Control shall also use the necessary means of having a large exhibition, at each annual meeting, of improved agricultural implements and machinery, with full and public trial of the same;—of improved stocks of all kinds, and particularly of inviting the exhibition of such animals as have taken premiums at other agricultural shows, with a view of testing the superiority of prize animals themselves; also, of the different breeds of animals, for the purpose of comparing the advantages of each. They shall affix to such exhibitions such premiums as they shall adjudge suitable, appointing such judges as they may select to award the same, which judges shall not only assign their preferences, but shall draw up a detailed report of their several examinations, setting forth fully a description of the articles or animals adjudged, and the grounds upon which their preferences are awarded.

"Article 12. It shall further be the duty of the Board of Control, when they think it expedient, to procure a model of such implements, and machinery as may have received a premium, to be kept in some suitable and convenient place, selected as an agricultural repertory, for the inspection of the public, and particularly of members of the Society.

"Article 13. The said Board may also award premiums for prize essays, to be read before the Society, for well conducted and well reported experiments in agriculture, having reference in the same to the prevailing agricultural productions of the different sections of the Union.

"Article 14. The said Board shall give due notice by advertisement, of the time and place of such exhibitions, the premiums to be awarded, and the committee by whom they are to be awarded, and for the expense attending the discharge of the duties herein imposed, they shall draw requisitions on the President, setting forth, severally, the items of expense, which requisitions shall be recorded by the Recording Secretary, and the President, if he approves the same, shall thereupon issue his draft on the Treasurer for the amount.

"Article 15. The said Board shall also be instructed to make efforts to obtain funds for the establishment of an Agricultural School, in the District of Columbia, and appurtenant thereto, a course of Public Lectures on Agriculture, Chemistry, Botany, Mineralogy, Geology, and Entomology, as appropriate sciences to the great *business of Agriculture*, which, with the buildings and improvements thereon, shall, in the language of SMITHSON, be set apart forever "*as an*

establishment for the increase and diffusion of knowledge among men."

"Article 16. The Board of Control shall procure an appropriate seal for the Society, to be attached to diplomas or other documents or instruments which may be issued to honorary members or other persons, under the directions of the Society. They shall fill all vacancies that may occur by death, resignation or otherwise, either in their own body, or the list of the officers, to continue until the next general meeting.

"Article 17. In further aid of the purpose of this Society, the said Board shall invite some suitable person to establish an agricultural publication in this city, and shall also petition Congress for the incorporation of this Society.

"Article 18. The first general meeting of this Society shall be in the city of Washington, on the first Wednesday in May next, and thereafter at such times as the Society may direct.

"On motion of Mr. Torry, of Massachusetts, it was

"*Resolved*, That the Board of Control of the Society be instructed to present a petition to the present Congress of the United States to set apart the Smithsonian bequest for the purpose of carrying out the Society."

The following officers were elected to serve until the regular election in May next:

President—James M. Garnett.
Corresponding Secretary—John S. Skinner.
Recording Secretary—John F. Callan.
Treasurer—Edward Dyer.
Board of Control—Levi Woodbury, Elisha Whittlesey, Alexander Hunter, John A. Smith, W. J. Stone.

One Vice-President was chosen from each State in the Union, and Mr. Edmund Ruffin was elected to represent the State of Virginia. The Vice-Presidents of Virginia, Maryland, District of Columbia, Pennsylvania, and Delaware, are, ex-officio, members of the Board of Control. The friends of this institution are very sanguine of its success, and of its beneficial effects upon American Agriculture. It is not, however, without its oponents, whom late events have rendered suspicious of mammoth schemes of any kind. Some think that it is destined, in a short lived and brilliant existence, to swallow up those county and neighborhood societies, that are now exciting so much interest, and doing so much good throughout the country. It is objected, also, that the question of incorporation has a tendency to ingulf the subject of Agriculture in the foul pool of party politics, by bringing to bear upon it the most exciting political question of the day, the power of the General Government to pass acts of incorporation.

On the other hand it is urged, that a great National Association, with large funds at their command, by the extensive exhibition which they will be able to concentrate at a central point, will give new eclat, and impart a new impulse, to Agriculture; that the establishment of an experimental farm, will induce the test of new discoveries, too expensive for private trial, that the national collection of models, essays, &c. &c. will form a source of unbounded instruction and amusement to the scientific farmer, who may visit the repository. In short, as is generally the case, extravagant expectations are formed on the one hand, and unnecessary fears entertained on the other. Our own opinion is, that the whole matter will prove a very *harmless* affair. At any rate, we are satisfied to take the advice of an old and experienced friend, and "judge the tree by its fruit."

DICKENS (BOZ?) HOGS.

Since the publication of the article over his name, we have received a note from General Richardson, stating the following as the weight of another lot of hogs of Mr. Dicken's stock, which he thinks a much fairer average of their capabilities than the one he has furnished in the article alluded to. That lot indeed is expressly stated to have been an inferior one, selected under disadvantages. These attained the following weights at eleven months old, under the ordinary farm keep, viz: 175—180—198—218—234 lbs. Although these weights are not very great, compared with what some of the Berkshires have been made to attain, the General thinks they are fully large enough for the Virginia Farmer, and that no Berkshires would have exceeded them with similar treatment.

HOUSE PAINTING.

Roofs of houses that are covered with shingles, are most generally painted with the cheapest kinds of oil paint, such as American yellow ochre, and lamp-black mixed with cheap refuse oil, and immediately covered or sprinkled over with sand. Tarred sheets of coarse paper, laid over the shingles, has in some cases proved an economical mode of preservation. When the outside of an old house is to be painted, if the clapboards or sheathing, have become very rough by exposure to the weather, the surface may be coated with a cheap composition of glue sizing

and whiting, or calcined plaster of paris, and if immediately painted over with oil paint, to protect it from the weather, this preparation will prove durable, and an immense saving of expense of oil, &c.—*Am. Mech.*

It is with great reluctance that we intrude ourselves upon our readers; most especially, at this time of universal and unexampled pressure, do we dislike to tax the kindness of our friends. But as a matter of necessity, we are compelled to request their assistance in enlarging our list of subscribers. We know that many, actuated by the most partial feelings of personal regard, estimate our little work far above its merits. Many to whom we are personally unknown have afforded us the most flattering assurances, that they considered the Planter a great acquisition to the agriculture of the South.

We have labored zealously and unceasingly, as we believe the work will testify, to collect for our readers a condensed account of all the agricultural improvements of the day. To read the great flood of essays with which the agricultural world is deluged, to pore over an essay of pages to collect only a single idea, involves a degree of labor and consumes a quantity of time, of which the inexperienced reader will form a poor conception. In fact, if the task is well performed, it leaves no time for any other occupation. We have pursued no other, and are dependant upon the Planter alone for our livelihood. For sixteen months, we have been engaged, day and night, for this work, without putting a dollar in our pocket. We have lived upon the prospect of future reward; we begin to long for more substantial fare, and think it is almost time we had received it.

Will not the "Old Dominion" sustain a paper devoted heart and soul to her interests?

All we ask, for the present, is a living; four thousand subscribers will afford it. Shall we not have them? Are there not to be found four thousand men, in Virginia alone, who will rally to the support of such an undertaking. A friend, to whom we privately said, a few weeks since, what we say publicly now, wrote us a little while afterwards—"I enclose you sixteen dollars which I have beat up in my neighborhood." If each of *our* friends, if each of the friends of agriculture, would only "beat up" in his neighborhood, how easily the thing could be effected. We flatter ourselves the work only wants to be known, to ensure us a subscription, commensurate with our moderate wants. Will you, reader, assist us in its dissemination? Will you mention the subject to your neighbor? Will you tell him, with a little stretch of conscience, that every number is worth the price of subscription; that although the times are hard, that is only the greater reason he should be careful to get the value of his money, and that he can make no better investment than in the purchase of an agricultural paper? An exchange paper was so kind lately as to estimate the value of each article in a number of the Planter at one dollar. At this rate, he would be making money fast enough to satisfy the most insatiate.

Over and above the pride of sustaining a *State paper*, we would suggest to our readers that their own interest is materially concerned in extending our subscription.

There is one department of our paper for which education has somewhat fitted us, and to which we design to pay particular attention, the improvements that are daily made in agricultural *implements* and *machines*. To exhibit these as they should be done, requires expensive engravings, and when our subscription justifies it, we think, by enlarging this department, we can greatly increase the interest of the paper.

Come, then, for our sake, for the sake of agriculture, and for your own sake, *beat up* and see what you can do in your neighborhood.

TO CORRESPONDENTS.

Several communications are necessarily laid over to our next. We are much obliged to "Collonus" for his article upon the cultivation of corn, but were obliged to defer it for want of the engraving, which was not quite completed when we went to press. Time and tide, and the Planter hereafter, wait for no man.

The article from A. D. is well written, and withal incontrovertible, but it is of so general a character, that it must yield to information more specific and practical, with which we are crowded.

Richmond Markets, March 26, 1842.

BUTTER—Mountain butter, wholesale 12½ a 16 cents for firkin; 20 cents for roll.

COTTON—S a 9 cents per lb.

COTTON YARNS—Richmond and Manchester, (factory prices,) Nos. 4, 5 and 6, 20c.; 7, 8 and 9, 21c.; 10, 11 and 12, 22c.; 13 and 14, 23c.; 15 and 16, 24c.; 17, 25c.; 18, 26c.; 19, 28; and 20, 28 cents.

CATTLE—For cattle on the hoof, from $4 to $5 50, are the general prices. Mutton—There is great variation in the quality; indifferent sheep bring only from $1 to $2, while the finer qualities bring from that to $5 per head.

CHEESE—8½ a 9 cents per lb. very scarce.

FEATHERS—38 a 40 cents per lb. for live geese.

FISH—Mackerel, No. 3, $7. Herrings—No. 1, North Carolina, $3 50; No. 2, $3; Potomac cut, $3 25. Shad, $8 50 per barrel.

FLOUR—Demand limited; sales at $5 87½ on the bank.

GRAIN—Wheat $1 05 a 1 15, prices now paid for good red and white. Corn, 50 to 52½ cts. per bushel. Oats, 50 cents. Some few sales from wagons and depot at 55 cents. Very little grain coming into market.

HIDES—Green 5 cts. per lb.; Spanish 13 a 16.

IRON—Pig, $25 to $35; Swedes, $100 per ton. English, $85 to $90; Tredegar, (Richmond manufactory,) $90; Up Country bar, $75 a $80 per ton.

LUMBER—Clear white pine $36; refuse clear 32b. merchantable $22; refuse last sale at $14; flooring $15 a $20 per M.

LIME—Thomaston 95 cents.

MEAL—65 to 70 cents per bushel.

PROVISIONS—Bacon—Smithfield and city cured 7 cents; Baltimore and Western 5 a 6 cents; oldsides 2½ a 4½ cents; old shoulders 2 a 4 cents. Lard, 6 a 7 1-2. All slow of sale.

PLASTER—On the Basin bank $5 50.

STEEL—American blistered $135 to $140 per ton.

TOBACCO—Receipts continue light. While we do not alter our quotations, prices we think have a downward tendency. Lugs $2 25 a $2 50 a 2 75. $5 a $6 general sales. Fine manufacturing $6½ a $9.

FREIGHTS.

NEW YORK—Flour, per bbl. 25 cts.—very little going. Coal, 8 a 8½ cents per bushel. Tobacco, $2 50 per hhd.; boxes 20 cts.; kegs 25 cents.

PHILADELPHIA—Flour, none going. Tobacco, $2 50 per hhd.; 20 cts. for boxes; 25 cts. for kegs, none going. Coal, 7 cents per bushel, Richmond measure.

ON THE CANAL—To Lynchburg and intermediate places, 10 cents per 100 lbs.

EXCHANGE.

FOREIGN—On London 15 per cent. premium.

DOMESTIC—New York Checks, 7½ premium.
Philadelphia, 7 premium.
Baltimore, 7½ premium.
North Carolina Bank Notes, par.
South Carolina, 4 premium.
Savannah, 2 premium.
Augusta, 2 premium.
Alabama, 15 a 20 discount.
Tennessee, 15 discount.
Specie, 5 a 5½ premium.

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THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.* | Tillage and Pasturage are the two breasts of the State. *Sully.*

C. T. BOTTS, Editor.

VOL. II. RICHMOND, MAY, 1842. No. 5.

CORN STALK SUGAR.

We are indebted to H. L. Ellsworth, Esq., the most excellent commissioner of patents, for a very interesting pamphlet published under the superintendence of the National Agricultural Society. It contains two articles; one, on the subject of making sugar from the stalks of Indian corn, and the other, upon the separation of the solid constituent of fatty substances for candles and other purposes.

Some time during the last year, Mr. William Webb, of Wilmington, Delaware, exhibited in Philadelphia some specimens of sugar obtained from the stalks of Indian corn, that attracted considerable attention, and were much admired for their superior quality. All vegetables contain more or less of saccharine matter, and there are few substances in nature out of which sugar may not be made. We had thought, however, that there was nothing yet discovered that could compete with the sugar cane. We, therefore, looked upon Mr. Webb's operations rather as curious, than likely to lead to any very practical results, and paid very little attention to the subject. We confess that this pamphlet, which is neither more nor less than the publication of an address delivered by Mr. Webb upon the subject, places the matter in a new light, and renders the subject one of the deepest interest to our readers.

Mr. Webb claims to have discovered a new and practical use for our great crop of Indian corn. If he is correct in his estimates, we are destined to become the sugar growers of the world. Maize or Indian corn is our peculiar product, and Mr. Webb thinks that sugar can be obtained from it at less expense than from any other article known to the world.

The many temptations offered by our prosperous and happy government to the enslaved population of Europe, has already produced a tide of emigration that has filled the channels of industry at present open. In almost every branch we are producing to excess, and nothing is more wanting than new resources for the surplus labor that we have already collected. This desideratum, if his estimates are correct, Mr. Webb has obtained, and he deserves to be ranked amongst the benefactors who have added to the variety, and consequently, to the extent of the products of his country.

We have said, that the fact, that sugar could be extracted from Indian corn, was not new; but Mr. Webb, by dint of sound reasoning and untiring experiment, has discovered the mode of management, by which the business may be made profitable. The corn should not be permitted to ear, nor the stalk to grow large. For this purpose, the corn is sowed in drills, and the ear nipped off in the embryo state, whereby the saccharine juice of the sap is retained in the stalk. By the bye, it seems, that M. Pallas, a citizen of that nation, which robs all others of the merit of discovery, had, as early as 1839, demonstrated to the Polytechnic Society of Paris, the great saccharine properties of Indian corn, and the method of increasing them by separating the ear from the plant immediately after the tasselling. This essay Mr. Webb had never seen, and although he arrived at the same results, he went far beyond the *speculations* of the Frenchman; he has actually made the sugar, of a quality pronounced to be far superior to any thing obtained from the beet with so imperfect an apparatus. He has found that the raw juice of maize is, in saccharine matter, to the juice of Louisiana cane, as 10 to 8, and to beet juice, as 10 to 3. He feels assured from calculations founded on experiments, that from 800 to 1,000 lbs. of sugar can be obtained from an acre properly cultivated in Indian corn. Mr. Webb endeavors to demonstrate, in the first place, that sugar must be made elsewhere than in the tropics. Statistics, he says, prove that a greater quantity of labor is annually required in the West Indies for the production of the same amount of sugar; that emancipation in some of the Islands, and the unpopularity of the slave trade, are daily lessening the only labor that has been hitherto found for this laborious and toilsome production. So that whilst the demand is

hourly increasing, causes are daily operating to lessen the supply from the tropics. Out of the tropics, the cane seldom matures, and he, therefore, compares the corn with the cane in Louisiana. The cost of seed is, as one to thirteen; the expense of planting, one to fifty; the cultivation about the same, the manufacture infinitely less, and the product per acre equal.

The beet, especially in this country, he thinks, will bear no comparison with it. The greater facility of cultivation, the peculiar adaptation of soil and climate, the greater freedom from foreign admixture in the juice, all combine to render the corn cheaper and more profitable than the beet sugar.

In the manufacture of the sugar from corn, one of the greatest advantages seems to be derived from the softness of the stalk, compared with cane, whereby, the power and machinery required to express the juice, are so much lighter and cheaper.

Whilst we have endeavored to condense Mr. Webb's general views upon this important subject, we have purposely omitted the detailed directions he gives for the manufacture of sugar; for, although we hope much from his ingenious labors, we do not consider the profits of the business fully established, or that the day has come, or will perhaps ever come, when, as he infers, the process will be so simplified, as to render every man his own sugar maker.

For the Southern Planter.

DRAINING AND MANURING.

Mr. Editor,—It may be safely affirmed that the two most prominent remedies for the improvement of land consist in *draining* and manuring. To have a good understanding of these will go far to the speedy restoration of our worn out lands. I know a piece of land on which a friend of mine has put hundreds of loads of manure, and yet the land looks very poor, arising from the too great abundance of water retained in the soil. As I often see in your useful paper, communications on both these subjects differing somewhat from my own views, I beg leave through the Planter to state a few things in reference to both.

1st. As it regards draining. There are many, who, although convinced that water retained in the soil neutralizes the fertilizing qualities of it, yet, are deterred from draining on account of the labor and expense, especially if wood is scarce with them. Now, the plan I pursue is certainly the cheapest of any I have yet seen recommended. It is as follows: I dig my drain, if possible, three feet deep, but so narrow at the bottom as just to let two pine poles lie side by side. Within four inches of the bottom, I lay pieces of pine of the same size with the poles across the drain, about four feet apart, on which the pine poles are to rest. These cross pieces are to keep the long poles from falling down on the bottom of the drain, and being four inches from it, give abundance of vent to the water. When I put down the long poles, it is necessary to reverse them, laying the thick end of one with the small end of the other; then, on the top of the poles put the pine brush thick enough to prevent the loose dirt from falling under the poles. I know some have been in the practice of laying down three poles in the bottom, but it does not answer a good purpose long, and in a short time, it is seen that the labor and poles are thrown away; but as long as poles will last under ground, you have a good drain; one, that will last longer than a box drain of plank. Moreover, in many places, the ground, through which you cut a ditch, is so soft that no box drain will be of any service, on account of its sinking; this you will see is remedied by the cross pieces, which can be made to stretch far enough across on both sides of the drain, as to resist the pressure; or if you choose, drive a stop down on each side of the drain for the cross piece to rest upon, as I have done many times. If I were near a saw mill, and had plenty of outside plank offered to me for nothing, I would make use of them to lay on the cross pieces; but as every body has pine poles, it is poorly worth while to be hauling slab plank from a distance. I have only to add, that I have made drains of stone, of plank, and of poles, and prefer the latter, for expedition and cheapness. I could say much on the importance of draining land, but as I fear I would be troublesome to you, I shall proceed to the next article.*

2d. On the most judicious method of using manure. I take it for granted that a majority of farmers admit that manure ought not to be deeply covered, but kept near the surface of the earth, and shall not, therefore, give the why or wherefore, only observing, that it is one thing to put manure *near* the surface, and another, to put it on the top, and leave it exposed to the wasting influence of exhalation. If, for example, it be hauled out and spread on the crop of wheat in the spring, or laid on the top of corn, so much of it is wasted by the influence of the sun and wind. Now, I am not saying that no good will be done to the wheat and corn by the above plan of surface dressing; what we are in pursuit of, is the most judicious method of using manure. Let a piece of land be taken which

* We will "trouble" Mr. F. if he pleases, for all he has to say upon the subject of Draining; but would suggest to him the advantage of using his full name instead of his initials.

has been in corn the previous year, plough it up well—haul out all the manure that can be spared —let it be scattered on this land, and, after oats has been sown, harrow it over with a large harrow, then sow clover and run a heavy roller over it, and when the clover and oats are above the ground, sow a bushel of plaster to the acre, and you have, in my judgment, the best way manure can be used, both as it regards saving it from waste and improving land. The harrow incorporates it with the earth sufficiently to prevent the ammonia from escaping, while every clod is pulverized by the roller, and manure and earth together brought directly in contact with the seed sown. J. F.

SOUTHERN MANUFACTURES.

We see that the Charleston Transcript is engaged in a very able demonstration of the capability of the South to manufacture her own products. We have been long satisfied of the fact, and it would be just as reasonable for Virginia to send her wheat and tobacco to be manufactured in New England, or in Europe, as it is in South Carolina to transport her cotton thousands of miles, to have it returned to her in manufactured goods. The perfect command of her laboring population, the subordination and system to which they may be subjected, the very low price at which their labor is obtained, being nothing more than the mere price of the plainest food and clothing, all combine to enable the South to compete with any portion of the globe, especially in the manufacture of her own products.

Whence originates the idea that the North can manufacture cheaper than the South? We answer, from the fact, that the price of northern *white* labor has been compared with the price of southern *white* labor. Habits of southern luxury infect even the mechanics within their influence, and render them unable to compete with their more economical brethren of the North. Consequently, in all of those articles, in which the cost of transportation is not too great, they have been driven from the market by northern importations. Where there is any thing like equality in natural advantages, the southern artificer can never compete with the northern workman, until he learns to reduce his expenses to the same standard. This he will not do, whilst nature invites him to a more generous living in the cultivation of the earth.

Here, we see, that the North manufactures cheaper, simply because she is less blessed by nature; because her people are poorer, and because the low prices, which the operative receives after all the expenses of getting his products to a southern market are paid, are still more than he can make at another calling, although infinitely less than would satisfy the *farmer of the South*. But we have another great class of operatives in our negro population, that are accustomed to no such expensive habits; whose labor is obtained for their victuals and clothes, the very lowest price at which it can be afforded any where. This labor, we maintain, can be made to compete successfully with any other upon the face of the earth. The only question is, how can it be most advantageously employed, and the answer heretofore has been, in the cultivation of the earth. But now that an overproduction has reduced the prices of our great southern staples, of cotton, wheat and tobacco, we believe it may be most advantageously diverted to manufactures. If thus, the increase of our population drives a portion of our people to encroach upon what has been heretofore the peculiar business of our northern allies, and they are injured by it, we most heartily sympathise with their afflictions, and wish to God we could continue to follow one branch of the business, leaving the other to them. But charity begins at home, and we believe that the only means of employing a large portion of southern labor advantageously, hereafter, will be to appropriate it to manufactures.

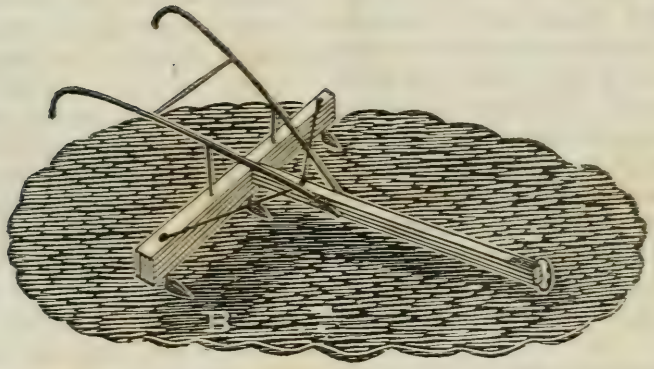
But we will be told that manufactures have been tried at the South, and have universally failed. Manufactures have been established, generally, at the South by joint stock companies, and such, we believe, will fail wherever they are tried, either at the South or the North. The old proverb is, "if you want your business done, get some body to do it for you, if you want it well done, do it yourself." Joint stock companies always "get somebody to do it for them," and they, if not the business, are in the end pretty sure to get *done*. Another great mistake, we think, that is generally made in the establishment of southern manufactories, is in the inordinate and unnecessary erection of expensive buildings, extra finish about machinery, a great deal of which is intended more for ornament than use. We have sometimes been surprised in visiting a northern manufactory, the reputation of which had created the imagination of a splendid and extensive establishment, to find the whole works probably under a wooden

cover, presenting an unpleasing contrast with some of the expensive factories we had left behind us. But when we got inside, we found cheerful, active, regularly paid workmen, instead of neglected machinery and abandoned implements, and this, because the capital of the proprietors was engaged in conducting their business, instead of being locked up in brick walls, with elegant fronts, and finely ornamented windows.

If instead of forming a joint stock company, any three men will unite their capital, one of them, at least, thoroughly understanding the mechanical part of the business they propose to conduct, purchase a parcel of sprightly negro boys, and take care to keep enough of their capital in *money*, to conduct the business, we believe they may engage in almost any branch of manufactures, with the certainty of success.

For the Southern Planter.

SIDE WIPER.



C. T. Botts, Esq.

Dear Sir,—Some of your readers desire a plan throughout, for making a crop of corn; as I have usually had good success on *good land*, with *good seasons* you shall have my mode. The preparation for, and mode of working the corn crop, differ frequently on adjoining farms; in some instances from want of skill, or industry, but in many, from a marked difference in soil; stiff clay land should be broken in the fall; all other soils with which I am acquainted in this section of the State, will yield by far a better return for the labor spent from spring ploughing; first you save (after planting) near half the work; secondly, your land is not so liable to wash, and will be in a better state for a wheat crop. Col Isbel has written a very sensible article for your paper on this subject; he and I agree as to the time of breaking most soils, but we differ widely as to the manner of planting, and working the crop.

My plan is to plough with a three-horse plough and cutter; turn the sod or soil perfectly; harrow until the land is in nice order; sometimes on turf I use a heavy roller to expedite the preparation—lay off with a three-horse plough, *on high land*, 5 feet—drop the corn from 1½ to 2 and 2½ feet, according to the strength of soil—cover with the coulter where it will answer, and follow with the hoe, chopping, and putting in nice order. Where the coulter will not answer, we cover with the hoe. When the corn is about four inches above ground, we run a two-horse harrow plump over it—follow with hoes and thin to two stalks in each hill; then, after a time, (the length of which depends on circumstances) the sooner the better, we run what is called a side wiper, the best tool for corn I have seen, (used no where that I have heard of but in Albemarle.) It is made with a beam 4 feet 8 inches in length, morticed into one 2 feet 8 inches, at an angle of about 45 degrees; the

handles are fixed as to a shovel or coulter, one tooth rather larger than the common cultivator fastened at top with a screw, is placed near each end, and one passes through both the beam and end piece. Follow with the hoes, and thin to one stalk per hill, chopping nicely; after a *time* we run the side wiper again, three times in each row, which leaves the land level, the three-horse furrow having by the various workings been levelled also. After harvest, if convenient, we walk over, hoe in hand, and chop out the large weeds, briers or bushes, which may have sprung up. The last of August and first of September, we cut and haul our corn to a lot near the barn, stack half a barrel at first, afterwards more—start two-horse ploughs to fallow the land for wheat. What corn we are unable to haul so far, is stacked round the fences, and in roads left for oats, twenty feet wide. We frequently haul home more than two-thirds the crop. Thus, when we begin sowing wheat, our fallow and corn land are all ready to sow down and harrow in. The amount of food thus saved, and its quality would amaze you, and many of your low land subscribers; when you visit Albemarle you shall see it.

Mr. Dicken's plan is good for flat, slash, or wet land, but the listing is needless with us; I have not a neighbor who does it. We begin usually in March to plough for corn—prepare and plant one-third or half, 15th of April, as nearly as may be—last April, one-third, or near it—and about the 10th May, the balance; thus we are rarely hard pressed in working corn. We make large crops of tobacco, and used to make good wheat crops, but have failed for years; the making corn is looked on by some of us as a light job, but in soils which run together, hold water, and have but little strength, it is a serious business.

Every section of country has its peculiar mode of farming and planting; could you find the best manager in each county, and prevail on them one and all to give you his plan for making one crop, or all crops, you would have just so many different schemes!! Corn may be cut and shocked without injury earlier than the fodder will be ripe, if put up well with an oak split, or grape vine near the top to prevent its falling. Over the Ridge, many graziers prefer this food to hay. After the harrow is run over the corn, is the best time for plastering.

COLLONUS.

Leigh, March 6, 1842.

At the head of this article will be found an engraving of the implement which our correspondent calls a "Side Wiper," and of which he sent us a drawing.

In the last "Southern Planter," a writer gives us a remedy for the mange in dogs. Although in common life things which are considered valueless are compared to a dog, yet the fidelity and affection of that valuable domestic animal have always made him an object of gratitude and care with man. If we should disregard his comforts, or neglect to alleviate his maladies, we should be wanting in those noble qualities in which he has set us the example.

Some years ago, when residing in the upper country, I had a very beautiful and favorite pointer. He became mangy over his whole body, and very much reduced, so that I expected to lose him. I had a friend residing in the neighborhood who owned a tan-yard. He was kind enough to take my dog for a week or ten days, and dip him in the tan-vat several times each day. He was then rubbed well with a mixture of tanner's oil and tar, and sent home. In the course of a short time the scales began to peel off, and new hair to grow out. He soon became the sleekest and prettiest animal I ever saw, and was never again affected with the disease, or even visited by vermin for a year or two. I often thought, by his playful antics that he was conscious of his obligations, and wished to express with kindness a gratitude which he felt; but the obligations were transferred to me, for he lived to afford me many an hour of sport and many a nice dish of game.

The disease is evidently infectious, and those that are subjects of it should not be permitted to consort with those that are not.

I hope the brief remarks above, may lead to the relief of many a valuable animal for the mutual protection and enjoyment of himself and owner.

W. J. DUPUY.

P. S.—In the case above related, I first resorted to the usual remedies, such as sulphur, &c. without effect.—*Farmers' Register.*

PIGGERY.

In the Western Farmer we find a description of Mr. H. S. Kellogg's piggery, which is very much lauded by the Editor.

Like many others, it has stalls with a division for straw for bedding, and a passage in the rear. Its great peculiarity is a swinging board, hanging perpendicularly over the centre of the trough. This may be bolted to either side of the trough, at pleasure, throwing the trough in the passage, or in the stall, as it is fastened to the front, or the back. This is a simple, ingenious, and useful arrangement. The hanging board being fastened to the front of the trough, the feeder in the passage may fill the troughs without molestation or hindrance from the impatient grunters. When this is done, he brings the board towards

him, and fastens it on the side next the passage, which, like the magic uncovering at the "Exchange Hotel," brings the repast within the reach of the hungry expectants.

BENEFITS OF DEEP PLOUGHING.

A gentleman some days since, while conversing with us upon the subject of agriculture, related the following instance in favor of deep ploughing. He said that his father, some twenty-five years ago, bought a farm which had been nearly worn out; that the surface soil was almost a bed of floating sand with a clay subsoil; that after cultivating it in the usual way, of shallow ploughing, for two or three years, he became vexed at the smallness of product, and determined to try the virtue of deep ploughing: that to effect this, he procured two double-horse ploughs, and made one plough follow in the track of the other, so that he penetrated the earth fully twelve inches, and threw up half that number of inches in depth, of the subsoil upon the top of the sand thrown down by the operation of the plough. This experiment was first tried upon a field of twenty acres, late in the fall, intended for corn the ensuing spring. The ground after being thus ploughed was harrowed and suffered to remain until sufficiently frozen to bear teams, when fifty bushels of lime to the acre was spread thereon. In the spring, the usual quantity of barn-yard manure was carted out, spread and ploughed in to the depth of four inches; after which the ground was harrowed, and an additional quantity of lime, at the rate of fifty bushels to the acre, was spread thereon, and harrowed in.

Our informant assured us, that while this operation of deep ploughing was going on, his father's neighbors admonished him of the danger of *poisoning* his land; but that when the corn crop came to be gathered, they changed their tunes, as instead of getting, as formerly, three or four barrels to the acre, there were housed 143 barrels of good corn and upwards of seven barrels of nubbins, and that the fourth year thereafter, after the field had been in wheat and clover, it brought rising of ten barrels of good corn to the acre, besides six of refuse corn.

As the above facts will speak for themselves, we shall omit all comment.

The above is extracted from the American Farmer, and is only another added to the thousand testimonials of the advantages of a deep soil. Every large growth, corn especially, requires it. It affords the surest protection against a drought, because the deeper strata, into which the roots will penetrate, are preserved free from the parching influence to which the shallower ones are exposed. The roots of some vegetables are known to penetrate several feet, and wherever the roots of a plant are inclined to go, there, if possible, it should find its food. Still the cost must be remembered. Deep ploughing is in itself more expensive than shallow, and the subsoil turned up can only be converted into a good soil, sometimes, at very heavy expense. We must remember, too, that the new theory is, that much the largest portion of the food of plants is obtained from the atmosphere, through their leaves.

If this be true, and the great Liebig says it is, it may be questioned whether, under certain circumstances, the expense of deepening the soil for the roots, might not be better bestowed in originating gaseous products for the leaves.

We only desire to awaken attention to the whole matter, so that the operator may duly consider, and expend his means to the greatest advantage.

POWDERED MILK.

Kirchoff, a Russian chemist, who discovered the process of converting starch into sugar, has recently made, it is said, several experiments on milk, by which it appears that fluid may be preserved for use for an indefinite time. Fresh milk is slowly evaporated by a very gentle heat, till it is reduced to dry powder, which is to be kept perfectly dry in a bottle, well stopped, for use. When required, it need only be diluted with a sufficient quantity of water, the mixture will then have all the taste and properties of new milk.

For the Southern Planter.

MAKING, PRESERVING AND APPLYING MANURE.

1. Making. The making manure is like the making of other things; every one has his own way, and thinks it best. A great deal may be made by using the proper means, collecting every thing that would otherwise be lost, and depositing it in a particular place. For instance, have a pen made near the kitchen—put into it from time to time all the ashes, trash, weeds growing on places where they are in the way. In this way I have seen a considerable quantity of manure made. Then to the stable, farm-pen, and hog-pen, all which should be kept well littered with straw, leaves, or other coarse material that you may have. My own opinion is that more leaves may be put into a farm-pen than is advisable. I would keep all these places well littered, and if more leaves were collected than was required for that purpose—pile them up in

the woods, apply lime or plaster, and in the spring spread and plough them in. By that means, one hauling is saved, and I think, equal benefit secured.

In cleaning out stables, cattle-sheds, and hog-sties, I would spread the manure over the farm-yard—by which means the whole is more rapidly decomposed, and is of equal strength, besides that it prevents what is called fire fang in the horse manure. By so arranging the farm-pen that no water can get into it but what falls from the clouds, and none can pass out—all the liquid portion of the manure is absorbed by the litter and the whole mass made rich.

In my travels, last year, I observed at a gentleman's house a plan that pleased me much. A pit was dug near to his stable, and when that required cleaning out, the manure was thrown into the pit with alternate layers of sand until filled, a covering of sand being the last, and a small trench connecting the pit with several smaller ones filled with litter, to absorb the liquid which escaped from the larger pit, by which means all was saved.

2. Preserving. The great secret of preserving is to prevent the escape of the liquid portion of manure. It will not do to rely upon its being absorbed by litter—if it can pass off, it will go.

Under the first head, "making," I have included necessarily the other means of preserving. After it is made, if it cannot be immediately applied, put it into a situation to prevent its heating, and cover it to prevent evaporation.

3. Applying. Manure is like money; any body can make it, but few take care of it, and apply it properly. I consider the last of most importance.

In the application of manure we all have some leading object in view; one to make a large crop of corn, another a large crop of tobacco, and another a large crop of something else. It should be so applied, that whilst it secures us good crops, it also secures the *permanent* improvement of our lands. This cannot be effected by those who have to rely upon their own resources, without giving back to the land in some form, a portion of its product. As the most effective means of rapid and extensive improvement, I would so apply manure as to produce good crops of clover, using for that purpose the finest, and applying the coarse manure to the corn crop. When a good crop of clover is once secured, I should rely upon that for keeping up the improvement on the land which produced it. Corn is an exhausting crop—I have known one crop of it to consume the fruits of six years' improvement. But as we cannot do without it, the cultivator should be careful not to tax his land, either by too much crowding or by a careless or injudicious mode of culture. Land may be kept in a state of improvement, and even be benefitted by a corn crop once in four or five years, if not grazed, or badly cultivated.

To return to manure. My opinion is that land, like the stomach, may be over-loaded with food—and as it is best to err on the safe side, I prefer to apply my manure in "broken doses," so that none shall be wasted. I have known persons to fail in making a good crop by applying too much manure—and with the loss of half that, and half the crop, few persons can afford to improve under such circumstances. It is, I think, bad policy to use any thing for the purpose of increasing the quantity of manure, that can of itself be applied as a top-dressing or otherwise—which takes off the produce of the land to add to the stock of manure. I contend that it is best to let it return to the land which produced it, by the natural course of decay.

As already stated, manure should not be applied in larger quantities than may be necessary to secure a good crop, and leave the land improved—otherwise if the season be a pushing one, the extra crop will take too much from the land—if it be a dry one, there will be a loss of crop and manure. It is, therefore, my opinion that it is best to apply so much manure only as may be necessary to secure a good crop and leave the land in a condition to produce a good crop of clover, by the aid of which the improvement may be continued and perpetuated. This appears to me to be the cheapest, and the surest, as it is the only way of effecting a general system of improvement, where the farmer has to rely upon the resources of the farm alone. I have tried it and my own experience has satisfied me that by these means a rapid and effective system of improvement can be kept up.

WILLIAM MILLER.

BREEDING.

The duration of life in the swine, is said by naturalists, to extend to twenty or thirty years, who report that the boar continues to grow to the end of the term. Swine are ready for procreation at the age of seven months, but the male is unprofitable for that purpose until twelve months old, and is in his prime at two years. In other respects, the age of swine is matter of small concern, since they are never kept until they are old; and it is the custom with many breeders to slaughter even their most prolific sows in the second year. The young sows to be preserved for breeding, should be chosen with deep and capacious bellies, the full number of teats, and of the most extensive or widest general form. The term of gestation in swine is four months, or one hundred and fifteen days, with a very few days variation, producing three litters of from five to twelve pigs each, in about eighteen months, supposing the pigs to be weaned; but in two or three months less time, the pigs

being suckled for roasters. I have, however, found, and more especially in the large breeds, that a litter of a moderate number is most profitable, since in the most numerous litters there are generally several undersized and weak individuals.

Thus a litter of nine or ten good pigs may bring more profit than a litter of thirteen or fourteen.—*Western Farmer.*

POTATOES.

Mr. Daniel I. Curtis, in a letter to the Editors of the Cultivator, expresses the opinion that too much seed is generally used in planting Irish potatoes. The consequence is a great many small potatoes, instead of a lesser number and greater weight of good ones. This opinion, long entertained, has been, he says, confirmed by experiments made during the last season, which he presents in the following tabular form:

"No. 1—All large potatoes, had in number, 368, weight 40 1-4 lbs.

"No. 2—Six eyes in hill, cut from large potatoes, 292, weight 39 1-4 lbs.

"No. 3—Four eyes in hill, cut from large potatoes, 220, weight 44 3-4 lbs.

"No. 4—Two eyes in hill, cut from large potatoes, 230, weight 45 lbs.

"No. 5—All small whole potatoes, 260, weight 45 1-4 lbs.

"No. 6—Six eyes, cut from small potatoes, 262, weight 41 1-4 lbs.

"No. 7—Four eyes, cut from small potatoes, 270, weight 49 1-4 lbs."

The season he says was a very dry one, but thinks that would not affect the relative results. The rows were all subjected to exactly the same treatment, there being no difference, except in the seed, which were all of the same variety. We infer, although it is not expressly stated, that the kind known as Pink Eye was the one used on this occasion.

IMPORTANCE OF THE QUALITY OF THE SALT USED IN MAKING BUTTER.

At a late agricultural meeting in Augusta, Maine, Dr. Bates stated that the Quakers in Fairfield were in the habit of buying the best description of coarse salt and cleansing it, and having it ground, and this salt they used in the manufacture of butter. The consequence was, the butter made by the Quakers of Fairfield, had a better reputation and bore a higher price than the butter made in other towns. He held them up as worthy of imitation. He stated that the loss of the butter manufactured in this State was greater in amount every year than the sum raised for the State tax—more than *two* hundred thousand dollars. He believed that, if this fact was generally understood, if the people could be made aware of the loss incurred by bad manufacture, we should at once see an improvement in this article of which so much is produced and which enters into our daily consumption.—*Maine Farmer.*

CHOKED CATTLE.

Mr. Josiah D. Smith, of the county of Henrico, desires us to say to his brother farmers, that after an ineffectual resort to the usual remedies, he relieved a choked ox, a few days since, by holding up his head, and pouring into his mouth a strong solution of soap in water. The relief was instantaneous, the turnip with which he was choked passing down immediately into the stomach.

Mr. "Whalen," in the Cultivator, says, that for animals that have good teeth, there is no occasion for slicing Ruta Baga, that sheep eat them decidedly better when fed whole, and cattle never choke on them.

From the Farmers' Gazette.

LUCERNE.

Mr. Editor,—I presume you have not forgotten my promise of the last year, to advise you of the result of my experiment on lucerne. I do this the more readily as I am informed several neighboring planters intend making the like experiment. You will recollect that my communication stated, that I sowed on the 25th of April, and that I thought it a month too late, at least. Of this I am now convinced, though my experiment is far from being full, it has been entirely satisfactory in one particular, that is, we can cultivate to profit.

I will first state the errors I committed, for the purpose of enabling others to avoid similar ones. My rows were twenty-two inches apart, they should not have been more than fifteen at the utmost, perhaps twelve, would be better. The land that I sowed upon was not dry enough, though it was pine land, it should be a very dry soil, one that quickly absorbs water. It should be trenched (as recommended by Arthur Young) to at least the depth of twelve inches, and filled with the best undecomposed manure for two-thirds of the distance from the bottom, the seeds should be sown thick, the most regular and expeditious way is, to put them in a bottle with a quill through its cork. These are some of the errors that I committed—having the rows too wide apart; not having a sufficiently rich and dry soil; and sowing the seeds too thin. It is

a waste of time and money to attempt cultivating lucerne without a very rich and dry soil, kept entirely clean of every thing that might obstruct its growth, though when once firmly rooted it would be difficult to eradicate it, yet in its earliest stages it is a very delicate plant. I pulled up about the 1st of January a sprig that had a root more than twelve inches in length, the lateral roots were very short, and few, and hence my conclusion that it will admit of being planted very close, and should be made very rich to a considerable depth.

In looking over some old papers sometime since, I found a very small pamphlet, entitled "A Treatise on the Culture of Lucerne in and about Richmond, Va., by Jacqueline Ambler, Esq." which is at your disposal, to make any extracts from that you may think interesting to your readers.

Yours, A PLANTER.

HIGH CULTIVATION MOST PROFITABLE.

The following is an extract from a letter of E. Phinney, Esq. published in the transactions of the Essex Agricultural Society. Thousands of acres in this country are in annual cultivation, the fertility of which has been so exhausted, that the product will not pay for the first ploughing. To continue to work without improving them, is the height of folly. By reducing the quantity, and concentrating the manure, the same yield might be obtained with half the force, and a good profit made, where labor is now thrown away. But how far is this system to be carried? How much money should a farmer lay out upon one acre before he begins to improve another? This will of course depend upon situation and circumstances. In the neighborhood of a city, where land is high, and a ready market afforded for vegetables, many of which can be crowded into a small space, it may be advisable to spend a hundred dollars upon the improvement of an acre. But to a farmer in the interior, whose land costs him eight or ten dollars an acre, we should say, divide it between two or three. It is more likely that thirty barrels of corn will be obtained from three acres, than twenty from one. The difference will more than pay for the extra work.

An ounce of fact is worth a pound of theory, and notwithstanding all we have seen and read of "extraordinary yields," we have observed, that your steady, prosperous farmer, was generally your six or eight barrel man. When you hear of one who has made "at the rate" of fifteen or twenty barrels to the acre, it is generally done upon the tenth of an acre; if effected upon a larger scale, and the cost is counted, the experimenter is ready to exclaim with Pyrrhus, "one such achievement more, and I am undone." We of course refer to those products obtained by imparting artificial fertility to worn-out land.

There is certainly a stopping point of expenditure per acre, and we believe, in a greater part even of our poor land, that it is a long way this side of a hundred dollars. Nevertheless, we shall be glad if Mr. Phinney's observations shall have the effect of stimulating our farmers to the true point; there is no great danger, yet awhile, of their going beyond it.

The question is often asked, How can farming be made profitable? I answer, by liberal manuring, deep and thorough ploughing, and clean culture. I will venture to affirm, without fear of contradiction, that no instance can be cited, where a farmer who has manured his grounds highly, made a judicious use of the plough, and cultivated with care, has failed to receive an ample remuneration for the amount invested—nay more, that has not received a greater advance upon his outlay than the average profit derived from any other business. One great difficulty is, that most farmers seem not to be aware of the fact, that the greater the outlay, to a reasonable extent, when skilfully applied, the greater will be the profit; they, therefore, manure sparingly, plough shallow, and the consequence is, get poorly paid for their labor. This has raised a prejudice and given a disrelish to the business of farming, especially among those who are in the habit and are desirous of realizing something more from their occupation than a naked return of the amount expended.

The farmer who is so sparing of his manure that he can get but thirty bushels of corn from an acre, gets barely enough to pay him for the expense of cultivation; and in addition to this, by the ordinary method of ploughing, his field, at each successive rotation, is deteriorating, his crops becoming less, and in a few years he finds he must abandon his exhausted and worn-out fields, to seek a subsistence for himself and family in some other business, or in some other region, where the hand of man has been less wasteful of the bounties of nature.

Instead then of his scanty manuring of ten cart-loads to the acre, which will give him but thirty bushels of corn, let him apply thirty loads. This additional twenty loads, at the usual price of manure in this part of the country, will cost him thirty dollars. But he now, instead of thirty bushels of corn, gets sixty bushels, and the increased quantity of stover will more than pay for the excess of labor required in cultivating

and harvesting the large crop over that of the small one. He has then added thirty bushels of corn to his crop by means of twenty loads of manure, which at the usual price of one dollar per bushel, pays him in the first crop for his extra outlay. His acre of land is laid to grass after taking off the corn, and the effect of his twenty loads of additional manuring, will be to give him, at the lowest estimate, three additional tons of hay in the three first years of mowing it, worth fifteen dollors a ton standing in the field. Now look at the result. His thirty dollars expended for extra manuring was paid for in the first year's crop, and at the end of three years more he will have received forty-five dollars profit on his outlay of thirty dollars: and in addition to this, his land is improved, and in much better condition for a second rotation. There is no delusion in this. It is a practical result, of the reality of which any farmer may satisfy himself, who will take the trouble to try the experiment.

From no item of outlays can the farmer derive so ample and so certain a profit, as from his expenditures for manure to a certain extent. This has been most strikingly verified by some of our West Cambridge farmers. It is not uncommon among some of the farmers in that town, to put on their grounds one hundred dollars' worth of manure to the acre, and in more instances than one, the gross sales of produce from ten acres under the plough, have amounted to five thousand dollars in one season. This is the result of high manuring and judicious cultivation of a soil too which is exceedingly poor and sandy.

BUTTER.

We have frequently urged the necessity of keeping milk or cream at a moderate temperature for churning. By artificial means, it must be kept cool in summer, and warm in winter. The following is an extract from a letter of Mr. C. N. Bement to the "Northern Light," upon the Management of Winter Butter:

"The process of extracting cream from milk, adopted in the county of Devonshire, England, by which a superior richness is produced in the cream had long been known by the name of 'clotted' or 'clouded cream.' They use a four-sided vessel formed of zinc plates twelve inches long, eight inches wide, and six inches deep, with a false bottom one half the depth. The only communication to the lower part is by a lip, through which it may he filled or emptied. A plate of perforated zinc, is placed in the bottom, which is equal in size to that of the false bottom, with ringed handles, by which means the whole of the cream can be lifted off in a sheet without remixing with the milk. The milk, fresh drawn from the cow, is strained into the pan, and remains at rest for twelve hours, when an equal quantity of boiling water is poured into the lower compartment, through the lip; it is then permitted to stand twelve hours more, when the cream will be found perfect, and of such consistence that it may be lifted off with the finger and thumb. In a trial of twelve successive experiments with the above apparatus, the following results were obtained: from four gallons of milk treated as above, produced in twenty-four hours, four and a half pints of cream, which after churning only fifteen minutes, gave forty ounces butter. The same quantity of milk treated in the common mode, in earthern ware pans, and standing forty-eight hours, produced four pints of cream, which after churning ninety minutes gave thirty-six ounces butter. The increase of cream was twelve and a half per cent. and of butter eleven per cent.

From the above suggestions, I caused a pan to be made six inches deep, to receive one of one-half the depth, which was set into the other, resting on the edge of the lower one, and carefully soldered together; near the top of the outer pan, a tube one inch in diameter was inserted, to admit the hot water, and on the opposite side a small hole was made to let the air escape when pouring in the water. With this double pan I tried several experiments, and the results, though varied, were very satisfactory.

In one instance, eleven pounds milk, fresh drawn from the cow, and after standing twelve hours boiling water was introduced into the lower pan, and stood thirty-six hours more, when it was skimmed and twelve hours after the cream was converted into butter, with a spoon and bowl, in seven minutes, and produced five ounces.

In another trial, eleven and a half pounds of milk, subject to the same process, except it stood only twelve hours after the hot water was put in; skimmed and churned immediately, which took only *one minute* to convert into butter—produce seven ounces.

In the next case eleven pounds of milk was conducted in the same manner as before, except standing twenty-four hours after the hot water was put in; skimmed and churned in eleven minutes, and produced six ounces of butter.

Several other trials were made, with a view of ascertaining the best time to let it stand after the introduction of the hot water and the result was that in some cases it took four, seven, ten and a half, eleven and fourteen minutes to churn, and the quantity varied from eight to twelve ounces, and in no instance did the quantity of milk exceed twelve and a half pounds, which was the most successful as to quantity, giving one ounce of butter for every pound of milk, which rates at one pound of butter from six quarts of milk, which is equal to the celebrated 'Haskin's cow,' the reputed mother of Colonel

Jaque's 'Cream Pot' breed as noticed in Mr. Colman's Fourth Report. The milk with which the above experiments were made, was taken from a two year old heifer, a cross of the Durham and Ayrshire, seventeen days after calving, and a heifer's milk is never considered as rich as when more advanced in years.

Allowing that we get, as we did in the last trial, one ounce of butter for every pound of milk, which will average twenty-three pounds daily, would be over ten pounds of butter per week.

From the foregoing experiments I have arrived at the following conclusions: that the most profitable method is to let the milk stand twelve hours—then add the boiling water, then stand twelve hours more, then skim, and churn the cream from the evening and morning's milk at the same time.

An improvement may be made in having the pans separate, but fitted tight where they come together, by which means they can be much easier cleaned and dried; as in the above method it would be more difficult to dry them when together.

I am inclined to think too, that the same pans may be made useful in the summer when the weather is very hot, and the quantity and quality of the cream much increased by filling the under pan with cold well or spring water, previous to putting in the milk."

The Editor adds, that Mr. Bement had sent him a sample of butter, made in thirty seconds, equal in quality to any he ever saw.

ASHES.

In answer to our correspondent's inquiry as to the operation of ashes on grass or on hoed crops, we would state they operate well on all dry and light soils, but they always have much more effect when the soil is full of vegetable matter which we wish to decompose than when it is destitute of it. Hence a handful of ashes—a gill—on a hill of corn, in green sward land, has four times as much effect as on land destitute of such matter.

Leached ashes, in large quantity, improve the *texture* of light soils, render them more cohesive and more capable of retaining moisture. For this reason they should never be applied to heavy soils—the low, clayey grounds. At five or six cents per bushel they will prove as cheap as manure at one dollar for a load, (thirty bushels); they operate for a longer term.

On grass lands we think dry ashes not suitable, alone, for a top dressing—there is nothing on which they can operate to advantage—but they may be mixed advantageously with any kind of vegetable matter. If mixed in large quantities with stable manures they may cause a more rapid decomposition than is desirable—but with peat muck they operate admirably. On corn lands one gill of ashes is enough for one hill, and this gill should be dropped on the surface *as soon as the corn is planted*—it then operates quicker and keeps away the worms.

Massachusetts Ploughman.

From the Northern Light.

THE WOODLAND.

BY W. BACON.

In a climate like ours, where wintry winds hold such unlimited control over the seasons; where, in the intensity of cold, the mercury sleeps so many nights below zero; in a country like ours, where cities are springing up on every hand, and populous villages, dressed in the freshness of yesterday, greet the eye at almost every corner; in our own country, where enterprise, smiling at the mockery of restraint, throws its curling smoke from every mountain and valley, rill and secluded dell; in such a country and in such an age, where every thing moves by steam, economy in fuel, and the protection of woodlands is a subject of universal interest, and may well call forth the attention of the philanthropist and the economist in its behalf.

In remarking upon this subject, we shall present the results of our own observation, and if they are wrong, we hope some one more skilled in these matters will have the goodness to correct them.

First, then, too much indifference towards woodlands is manifested by the general practice of allowing them to lie in common with highways or pasture lands, where cattle without restraint range over them, destroying all young shoots which are starting up to supply a new generation of trees, when the present crop shall have been removed. If this practice were universal, fifty years hence, and we believe a much less period, would find our country as destitute of trees as the deserts of Africa. Where then would the supply for fuel and for building be found? Our coal mines might, in some measure, remedy the evil; but it would be in a very slight degree. The quarry might furnish materials for fences and for buildings; but there are innumerable purposes to which even the treasures of the quarry cannot apply. There is, in fact, no substitute for wood, no getting along without it, unless an individual would go through the world by a mere *get along* impulse. How, then, can the present course of wastefulness, which so generally exists, be tolerated, even by owners of lands kept in this sad predicament of commonalty? Surely, it cannot be because the profits will not pay the expense of fencing, for no lands yield a greater profit in proportion to expenditure than forest lands. The present prices of fuel and timber warrant this assertion.

The second consideration we offer in regard to economy in timber land, is the time of felling. Here public opinion is at variance. So far as durability in the timber taken off is concerned, some suppose that winter is the best season, as in common phrase, the sap is down; others prefer midsummer. As regards the two seasons for the operation, we do not imagine that any material difference can exist where favorable circumstances are brought to bear upon the object. There must be a circulation of sap in winter, else how can the buds retain their vitality? Indeed, we know there is, unless it is impeded by frost, for we see it exude from the fallen tree. And in evergreens, which are cut down in December, the leaves usually dry and fall from the branches before spring. That sap flows more freely in spring and autumn we do not doubt, for every observer knows it does. But we consider the argument vain, and contrary to nature, that supposes that the vital fluid of trees does not, like that of animals, flow through the system at all times, unless impeded by counteracting causes. Yet, as the flow of sap is most abundant in spring, when the freezing and thawing of the earth, are the consequence of day and night; and in autumn, when like causes are in operation, we should give it as our unscrupulous opinion, that these are the two worst seasons of the year for felling timber, either to insure its durability or a new crop from the roots of the trees fallen.

Timber fallen in midsummer is rendered very firm and durable by immediately divesting it of the bark; or if it is designed for fuel, splitting is immediately necessary, in order that the liquid matter it contains may pass off. Unless these processes are performed, as every farmer may well know, decay soon sets itself to work. Two chesnut rails, taken from the same tree, will give an example: the one, if of a proper size, with the bark immediately stripped, will last thirty, forty, perhaps fifty years; while one, with the bark on, will do well if it lasts a dozen years. Thus we see, that durability in timber depends somewhat on precautionary measures to make it so.

For fire wood, if only the present profit is to be consulted, September is undoubtedly the best month for chopping, as by this the growth of the present year may be gained, and yet the wood, if properly prepared, have sufficient time for seasoning before winter, and will make a livelier, better fire than that prepared a year previous. Yet this is only a temporary advantage, one for the present few days, while the many future ones have a claim upon operations.—Where timber is cut at this season, the land is slow to produce a new growth. The roots, exhausted by the labors of summer, send up feeble shoots, if they send up any; and these, for the most part, sicken and die before reaching maturity.

On the whole, all things considered, we think the weight of evidence goes strongly in favor of winter chopping. It is the season of leisure from other employments to the farmer: hence the appropriate one for this; and timber cut at this season possesses every desirable quality, if means to establish those qualities are employed, for the wood cut now must be split and housed in order to make it excellent; and the timber, whether for fences, buildings, or any other purpose, must pass through a seasoning process (unless employed under water) with the bark off, which may be divested in spring, in order to substantiate its full value; and where reproduction is desired, it is, of all "times and seasons," decidedly the best.

When it is expected that a new growth will ensue, particular attention must be paid to the manner of felling the trees. Economy requires that the tree should be cut as near the ground as possible, as thereby wood will be saved. And where trees are so cut, they much more readily throw up shoots, than when a high, unsightly stump remains. And these shoots will be of a healthier and more vigorous character. Care should also be taken, in chopping, that the stump be not left hollowing inward, like a dish; for in this case it would become a reservoir for the rains, and the water collected there would become a fountain of mischief, working through the stump to the roots, which sustain the new plant, and inducing diseases which would defy remedy.

Another error in regard to the management of woodlands, and which has no claim to approbation, save its popularity, is the prevailing practice of chopping only the old trees and such as are beginning to decay. By this process, much valuable young timber must necessarily be destroyed; the woodland becomes thin; the winds pass through it with fury, twisting the remaining trees greatly to their injury, and in the event making them a sickly, short lived affair. Cut clean as you go, is a motto which cannot be too clearly adhered to with regard to woodlands; then there will be no lodging trees; no regrets at breaking down young timber; no necessity for paths here and there, which, in many woodlots occupy almost as much space as the wood itself. A new and even growth will spring up, which will protect itself from the violence of winds, and shield the earth and roots from scorching sunbeams. As it advances in growth, the sickly plants will die out, and nature, by a process of her own, will prune such as remain to her own advantage. Where shoots start from stumps, however, it may be well to thin them with an axe the second year, for such shoots are liable to start in so great abundance as to exhaust, to a great extent, the source of nourishment. This is especially the case with the chesnut. But let it be remembered, that from

woodlands so managed, cattle and sheep must be kept at a respectful distance, else the bump of destructiveness will manifest itself very seriously to the injury of the owner of the lands.

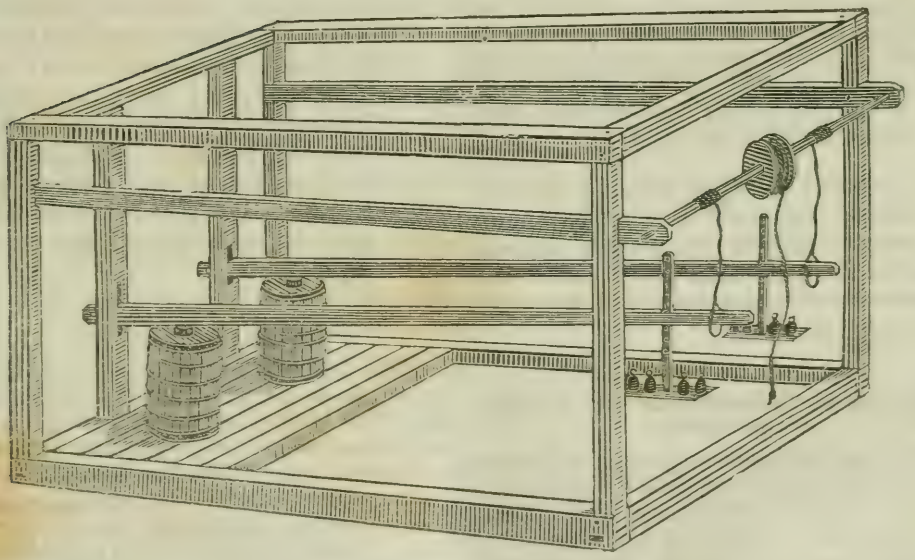
Where timber lands are cut off with a view of renewing their growth, then the winter months are the preferable time for performing the operation. When trees are cut in spring or summer, shoots will start; but they are less vigorous than those which spring from winter clearings, and more liable to decay.

The period necessary for a forest to renew itself varies with the soil and location to from twenty to thirty years. We have seen very pretty woodlots, of tall, handsome trees, which were said to have been entirely cut off twenty years before; and there are instances mentioned in which, by cutting off well covered woodlands, a new crop has appeared in that time, more valuable than the one taken off.

A new variety of trees is usually introduced to the soil. Evergreens never start from the stump or root of old trees, but are succeeded by birch, beech and maple. Beech, though a reproductive tree, is usually succeeded by maple and white ash. Thus nature gives a rotation of crops, which may, to some extent, account for the rapid growth of trees on lands which have been cut over.

Mount Osceola, January, 1842.

TOBACCO PRIZE.



The above engraving is taken from a model of a tobacco prize, furnished us by Dr. R. H. Nelson, of Hanover. He thinks it superior to any other in use, both in simplicity and cheapness. The Doctor's tobacco-house consists of two log-pens, twenty feet square, with a twelve foot passage between. In this passage the prizes are placed, the sides of the pens answering to the frame work represented in the engraving. Consequently, all that is wanted is two uprights securely fastened to a cross piece above and another below. They can be so secured as to be immovable except at the expense of the house. The levers are moticed into the uprights in the usual manner, and the sword passing through the other end, with the stand for the weights, is after the common mode. The wheel and axle, by which the levers are raised, is peculiar, and we think an excellent contrivance. The power here depends upon the difference between the size of the wheel and the axle, and may be increased at pleasure. By pulling the rope which is coiled around the wheel, a lad may raise both levers at once, and

enable a man to prepare the hogsheads for another prize.

If it be desirable to raise or lower the sword to which the weights are attached, the power of the wheel and axle can be applied to this purpose also, by simply slipping the loop from the end of the lever, and hooking it over a pin in the sword.

CHINESE METHOD OF PROPAGATING FRUIT TREES.

Take about two quarts of moist earth and tie it around the limb, which you wish to make a new tree of, by means of a piece of old cloth, or any thing else that will keep in place. Let it remain several months, till the earth becomes full of small roots. Then cut off the limb just below the parcel of earth, and set it in the ground. The small roots soon become large ones, and the limb speedily forms a productive tree. If the earth be put on a good limb in April it would probably be fit to plant in November; though I cannot say it would not require another year. This method may, in many cases, be better than grafting, cutting off roots and planting the sprouts that run up from them, or any other method in use among us for multiplying the number of trees bearing choice kinds of apples, or other fruits.—*Vermont Chronicle.*

Care should be taken to include a bud or eye in the earth, and it will be better if one or two incisions are made through the bark, about one-third of the way round. With shrubs, it is more convenient to peg down a twig in the earth in which it grows.

METHOD OF DETERMINING THE WEIGHT OF CATTLE.

The following rules are given in an English agricultural work of established reputation. I cannot vouch for their exactness; but should they upon trial be found of use, the table, calculated upon these principles, might be easily published in a convenient form for general use, like an interest table:

"The following method of ascertaining the dead weight of cattle by measurement when alive, has been adopted to a considerable extent. It is found to be an expeditious mode; and if not to be implicitly depended upon, at least furnishes a very important assistance to the judgment of the dealer.

"Rule.—Take the *girth* of the beast by measuring round with a string or tape close behind the shoulder-blade, and the length by measuring from the fore part of the shoulder-blade, along the back, to that bone of the tail which is in a perpendicular line with the hind part of the buttock. Multiply the girth (in feet) by itself, and that product by the length, and then again by 42; the last product, divided by 100, will give the weight in Smithfield stones of 8 lbs. each. If stones of 14 lbs. are required, the multiplier will be 24 instead of 42."—*Baxter's Library of Agricultural Knowledge*, p. 364.

BONE DUST.

An anonymous correspondent of the Albany Cultivator states that, he put twenty loads of long manure on an acre of good sward land in May, turned it under, and harrowed well. He then mixed twenty bushels of bone dust and twenty bushels of loam, and, when fermented well, put this compost in each hill, dropped his corn upon it, and covered in the usual manner. The experiment was a total failure. The Editors think that the want of success in this case is to be attributed to the state of fermentation in the compost; the heat produced being so long continued as seriously to affect the germinating powers of the corn. They say they have known a precisely similar result from the use of hog and horse manure applied to corn in the hill, or the seed planted on it, while the manure was in a high state of fermentation. They, however, admit that many failures have occurred with bone dust, notwithstanding its general beneficial effects, upon root crops especially, that are entirely inexplicable.

SALT FOR HOGS.

Swine that are kept mostly on fresh food such as roots, apples, &c. with but little seasoned food, require salt as often, and are as fond of it in its simple state, and as much benefitted by it too, as the sheep or cow. We have found, by recent experience, that a store hog, confined to fresh food, will eat an average one pint of salt per week. Farmers would do well to attend to this propensity, as by the free use of salt many of those fearful diseases to which hogs are subject during their confinement would be ameliorated.

Yankee Farmer.

BONE MANURE.

Professor Coleman says, "The most successful application, which I have known, of bone manure, was, where it was mixed at the rate of about one part to eight with leached ashes or mould, and a fermentation brought on before they were applied. It was then spread lightly in the furrows where carrots were sown."

Care should be taken, that the bones used have not been subjected to heat, as the gelatine, which is separated by this process, is known to be the most valuable part of the bone.

SCARE-CROWS.

The best *scare-crows* we have ever used, were bright sheets of *tin* suspended from poles, by wires; the poles of sufficient height, and in sufficient numbers, to be seen all over the field. Four or six, if judiciously placed, will effectually answer for a field of fifty acres. Our mode of fixing them was this; we cut a pole of sufficient height, trimmed off all the limbs but the upper one; to the end of this limb, we attached, by a strong flexible wire, a sheet of tin, and planted the pole thus provided firmly in the ground on the destined spot. The limb left at the top, should project horizontally far enough to allow full play to the tin. Thus attached, the slightest breeze gives motion to the tin, and consequently causes a reflection, so sudden as to effectually frighten off crows, or other birds addicted to picking up the corn. Three years successful use of such *scare-crows*, justify us in recommending them to our brethren.

American Farmer.

A writer in a South Carolina paper recommends the use of newspapers instead of sheets of tin, and thinks that there is great choice amongst them, in respect to the noise they make.

We have received the following communication from our friend Mr. PEDDER, of the Farmers' Cabinet, in relation to the article "The Level," p. 69, and our comments, in the last number, upon his "Boilers."

We felt a little curious to see how he would extricate himself from the difficulty about *that level*, and congratulate him upon the ingenuity of his explanation.

We most cordially reciprocate Mr. Pedder's kind wishes, and shall prize highly the present alluded to in his postscript. We shall avail ourselves of the earliest opportunity to reduce it into possession.

THE SPAN LEVEL, &c.

Philadelphia, April 10, 1842.

My Dear Sir,—I cry 'cave—but if confession of a fault makes *one* half amends, the comeliness of the bantling is a very fair apology for the *other*. You must know, I have always entertained a strong *penchant* for other people's children, especially if their parents are amiable and commanding the respect of good society; so, meeting with a child of your's, I took him by the hand without examining his proportions, as I hold to the axiom in breeding, "like produces like;" nor was I sensible of the lad's deficiency, until our lynx-eyed correspondent, J. Lewis, by a glance at his lower extremities, directed my attention thitherward, when I found that he was short of one leg! a sad defect certainly, and one that must needs ruin his standing in society; but as all was sound about the head, our Pottsville friend found it not difficult to set him upright, and now he will be able to pursue the even tenor of his way without further trouble or assistance.

You do me honor by the notice which you take of my boilers, but I am very desirous of knowing what are the difficulties which you suspect in the way of their working. There were sixteen of these fire-places erected at Mr. Lovering's Sugar Refinery, large enough to admit cord-wood at full length, namely, four feet; and at each burning, the quantity of wood consumed was not less than four or five cords, yet, for the space of four years no difficulty has ever occurred, or any escape of smoke from the top of the chimney, after the fires are once lighted, although the fires are kept up for eighteen hours; the heat being augmented—merely by opening the iron covers—to such a degree as to liquefy the iron pots in the kilns in a very short space of time, if exposed to its violence, operating expressly on the principle of the blow-pipe; all which, however, can be regulated in an instant, and to any degree, by partially or wholly closing the covers, or putting in the slides; all further operations being stopped as effectually and suddenly as the turning off steam. Indeed I am anxious to hear what are the difficulties which you feel *in prospect*.

Since writing the above, I have received your very interesting number for April, and can now proceed to relieve your mind from farther doubt respecting the working of the fires from the top, by assuring you that the draught of air from above, appears about as natural as for the "sparks to fly upward." The pressure of the atmosphere on the fire being cut off by way of the chimney, the air finds a quicker passage to it from immediately above, than it could by descending down it, and this determines the draught downwards through the pit so soon as the cold air is driven out of the chimney, which it very soon is, after the fire is lighted; and then the operation goes on as naturally and rationally as though the air were to ascend by means of draught from below. The only way of clearing the ashes from the pit, is from above, but it is done most easily by a small scoop with a crooked handle; and it will be a matter of astonishment to find how small a portion of ashes will remain, after the consumption of even a cord of wood, the combustion being so complete as to reduce all to

mere dust, so light as to be driven away before the blast. It may, however, be desirable to leave a loose brick at the bottom of the boiler for the introduction of a small scraper, by which the light dust, which might accumulate after a time, may be easily removed remembering, however, to close all tight before lighting the fire, for the least air entering that way, would effectually mar all proceedings. The brick-work around the boilers need only be four and a half inches; the sides of the ash-pit will be stronger if nine inches, but very little impression will be made upon the sides or bottom by the fire, the rush of air from above, keeping all comparatively cool. The chimney need not be higher than customary, nor is there any art required in the construction of any part of the apparatus.

I am, dear sir, very truly your's,

JAMES PEDDER.

P. S.—It would oblige me if you could, by the hand of some friend visiting Philadelphia, obtain a copy of my little book, "The Farmer's Land Measurer," which is left at the office to your address. Pray accept it, with the best wishes for your health, and the success of your highly valuable work.

RICHMOND MANUFACTURE.

We have been presented by the author with a copy of a work, entitled BOLTON ON STRABISMUS, which, we are informed was written, printed, illustrated, and bound in this city, and which certainly does great credit to our artificers. We understand it to be a dissertation upon the defect of *squinting*, and although we are not qualified to speak of the scientific merits of the work, if we might be permitted to form an opinion from the talents, industry, and success of the youthful author, we should expect it to form a valuable acquisition to the medical profession.

We wonder if the operation and remedies proposed would be applicable to the obliquity of vision that distinguishes some of our public characters. If the Doctor will guarantee that all who are brought to him shall be made to *see straight*, we think we could pick him out a lot of patients, upon whom he might operate at the public expense.

For the Southern Planter.

STOCK.

Albemarle, April 10, 1842.

I am well pleased, Mr. Editor, at the independence you exhibit in the discussion of the merits of different kinds of stock. We are often egregiously imposed on in the purchase of crack animals, puffed in newspapers. A systematic plan is adopted, I believe, to defraud southern men, and I rejoice to find that some one dares to speak out upon what has long been a private grievance. With respect to this very "Cream Pot" cattle, referred to in your last, I am credibly informed, that a gentleman of this State, who had read a great deal about this stock in the northern papers, applied to Col. Jaques, to know for what sum he could obtain two yearlings of his stock; the answer was, that, as he, Colonel Jaques, was anxious to extend the merits of his stock amongst the Southern people, and as the applicant was understood to be a good farmer, who would pay them all proper attention, &c. &c. &c. why, as a great favor, he might have the pair for the sum of $1,000. That, mark you, was the *Southern* price; when subjected to the hammer of the Northern auctioneer, they bring $32 per head.

My advice to the farmers of the South would be, in the first place reform your system of keeping stock, then select and cross judiciously with the best individuals of your neighborhood, and never purchase an animal, unless you can have an opportunity of seeing him yourself, or can have him selected by some one, on whose judgment and integrity you can rely.

A SUFFERER.

We are amused at the skill displayed by our correspondent; he lauds us for coming forward to expose impositions, whilst he backs us, himself, under a mask. We do not believe that any concert for cheating Southern men exists at the North; impositions have been practised both there and here, we doubt not, to a considerable extent; but as honest men as breathe are, we know, engaged, both here and there, in the useful and honorable occupation of raising stock for market. We will not knowingly lend ourselves to subserve the interest of any individual by saying more of his stock than it deserves, but any direct charge of imposition, or a statement of facts calculated to deteriorate the value of a popular stock, must always be accompanied by the name of the author, to find its way into the columns of the planter. The statement made by "A Sufferer," with respect to the price required for a pair of his cattle by Col. Jaques, we know to be true, from a responsible source, and although it seems strange that he should so over-estimate his stock, still, the difference between the price asked by him and that at which they were sold, may be accounted for in a hundred different ways, without tarnishing the honor of that gentleman, who, we believe,

stands much higher than his cattle in the estimation of his neighbors.

The *advice* of "A Sufferer" we think good.

For the Southern Planter.

In the last (April) number of the Southern Planter is a communication, signed William H. Richardson, in which the writer undertakes to define "the best farm hog of the several breeds, with which he is acquainted." This communication, it appears (page 82,) "was written in consequence of a request on the part" of the Editor; and is so much in accordance with the Editor's sentiments, that he seems disposed to endorse every word of it. The Editor also seems to anticipate a "rating from some deeply interested in Berkshire stock for seeking the publication of any article to their disparagement."

This communication, with the approving remarks of the Editor, I think, requires some comment. At the same time, I do hereby distinctly state, that I am not *deeply* interested in this or any other stock of hogs; and even if I were, I have not the slightest disposition to give the Editor a "rating" on this or any other score. But the Editor will allow me to say, that in my opinion he has somewhat departed from his usual prudence, in making the admission, that he sought an article to the *disparagement* of any stock whatever. We were not precisely prepared to expect, that that same Editor, who has for a year or more, devoted his time, his talents, and his whole energies to the improvement of the various branches of agriculture, should now undertake to *disparage* an important appendage to the same. But if the Editor must have a "rating" for this, *I* will not give it to him. I will let this rating come from another quarter—from the Southern Planter number for March, 1842, page 56—in which I find this strong language—"We have seen some Berkshires certainly superior to any other hogs we ever saw." Now, there is no name signed to the above, but judging from the editorial word "*we*," which occurs twice, and from other characteristic circumstances, I strongly suspect it was written by the Editor himself. If, however, this should not be "rating" enough, I refer him again to number for May, 1841, page 70, where, in a note appended to Mr Shelton's communication, he will find all the "rating" that I have it in my heart to give him.

With these few remarks, I will—for the present at least—take my leave of the worthy Editor. But the communication must not be passed over in quite so summary a way.

And here, if it be necessary to tell him so, I will state that I have the highest respect for General Richardson, and for Mr. Dicken, whose hogs he seems so anxious to recommend. Both these gentlemen are my near neighbors, and my intercourse with them, has uniformly been so pleasant, that I wish they were still nearer to me. But notwithstanding my great respect, and even partiality for these neighbors, I cannot suffer some things in the General's communication to pass unnoticed.

I beg leave, also, to make another remark—that in the comments which I am about to submit, I shall have no special allusion to Mr. Dicken's or any other breed of hogs. My object is not to *disparage* any man's hogs, but simply to vindicate a breed which, at the request of the Editor, has already suffered "disparagement." My object is not, therefore, to *attack*, but simply *defend*. Indeed I am very sorry that Mr. Dicken's name appears at all in the communication. This circumstance hampers me no little. Mr. Dicken, I am sure, will believe me, when I say that I do not wish to decry his hogs, or to prevent the sale of his pigs. I care not how much his hogs are praised; but I do care when I see a better hog *disparaged*.

The points of difference between the General and myself, I am happy to say, are very few. If, for instance, he had contented himself to state that there are a great many inferior hogs among the reputed Berkshires, so much so, that many of Mr. Dicken's white hogs—or the white or black or any other colored hogs of many other persons—are superior to them, he would have had my hearty concurrence. But when he seeks to make the impression that the white hog is in fact the *best*, and that when mixed with the Berkshire, a deterioration takes place, and that this deterioration is in proportion to the amount of admixture; then I am constrained to join issue with him. Now, that this is the General's meaning, I think I cannot be mistaken. Witness what he says about his own sow, page 81—and of her two litters of pigs. The first time she had seven pigs—"four white like herself—the other three tawny or reddish color, spotted with black"—which it seems "was the distinctive color of the Berkshires thirty-five years ago." One he sold to the writer of this. "That purchased by Mr. Turner though a very fine, is not near so large a hog as the white ones have proved to be, and both the spotted ones that I kept, turned out small hogs." Here it is distinctly stated that the four white ones which resembled the sow, were much larger than the three spotted ones which showed the Berkshire cross. But, as if not satisfied with the above, the General continues in a still more decisive strain. "The same sow has now a litter of ten pigs by another Berkshire boar, of which seven are white like herself, and three spotted, as before described. The *white* are decidedly the finest pigs." Thus, it seems, that this sow, breeding from two Berkshire boars, produced pigs which in both instances were fine

and promising in proportion as they resembled her, and that they were small and inferior in proportion as they resembled the boar.

Now, I do not call in question one iota of the General's statement; and it would constitute so knotty a case, that I know not how I could dispose of it, were it not that the General has disposed of it himself—the *little, inferior tawny* pig brought twenty dollars—whilst it took the *four large superior* pigs to bring thirty dollars? The Berkshires are then the fellows to fill the pocket after all. If the General succeed in disposing of the present litter as he did of the former, the three *little* Berkshires will produce more money, than the seven fine white pigs; and this, in my opinion, is just about the relative value of the different breeds—three *good* Berkshires against seven of any other breed.

But the General or Editor—it does not appear which—says that "Mr. Wm. Miller, Mr. Wm. Hill, Mr. W. W. Guy, Mr. William D. Sims, and Dr. Hopkins have all tried and prefer these (white) hogs." Now here would be another tough case to solve, were it not for some stubborn facts, which again come in to my relief. These gentlemen have tried the white hog, it seems, and most of them have manifested their preference for him, by sending their sows to my Berkshire boar, and this they did when their favorite hog was more convenient, than the inferior Berkshire.

Mr. Sims, also, though in possession of the white hog, has also manifested his preference, by *buying* the half Berkshires; and this he did, when he could have got the *preferred white* hog, for one-fourth of the money. How Mr. Guy and the Doctor manage their crosses, I am not informed, but presume that they stick to the *superior* hog. All the others, with Mr. Dicken himself, are backing out.

But the General continues—"You remember, no doubt, the white boar exhibited by him (Mr. Dicken) at our first fair, last May, which was purchased by Dr. Lewis, of Lawrenceville. If I am correctly informed, the Committee on Swine had no little difficulty in deciding the premium between him and the boar President." Now I am sorry that my friend the General penned the above sentence. As it stands, I must notice it; but I would greatly prefer that it had never seen the light. A compliment is here evidently intended somewhere—if to the boar, (and I suppose this must be the case,) then it must be at the expense of the Committee. The truth is, I never intended that my boar President should be put in competition with *that* white boar or any other *white* boar. I intended that the conflict should be confined between him and other *fine* hogs. If he obtained the victory, I intended it should be under circumstances that would do him some credit. But to get the premium over the hog alluded to, I never considered as any victory at all. But what were the facts in the case? The Committee on Hogs consisted of three persons—Mr. C. T. Botts, Mr. Sims, and Mr. Corbin Warwick. The arrangement was for the Committee to meet at nine o'clock, so as to make up their decision and hand in their report at eleven o'clock, at which time the exhibition was to commence. At the appointed hour, the two first named gentlemen were present, but Mr. Warwick was absent. After waiting for him until they could wait no longer, it was determined to appoint another in his place; and as Mr. W. B. Sydnor happened to make his appearance at the time, he was appointed to fill the place of the absent member. The Committee then went to work, and as *I was informed*, two of them—Mr. Botts and Mr. Sydnor—had no difficulty at all in making up their decision. The only difficulty was with Mr. Sims, the third member. Mr. Warwick made his appearance *before* the business was concluded, and as I was again informed, had no difficulty in concurring with the majority of the Committee. I tell this thing just as it was told to me. If I am incorrect, I call on the above gentlemen to state wherein I am wrong, and then I will most cheerfully correct it. This is all, that at present I choose to say about this transaction—if urged to it, I will state more.

One other thing, in the General's communication, I feel it my duty to notice. He says, (page 82) "it is but just to say of *his* (Mr. Turner's) stock, that *it* cannot be surpassed by all New York and New England together." I certainly thank the General for the commendation he has thus given to my hogs; but at the same time, must in candor say, that in my opinion, they do not merit it in the *unqualified* terms he is pleased to employ. If his remark is intended to be confined to my sow Virginia and her progeny, then I can with the same candor say, that I believe he is correct. But I have other hogs called Berkshires, and I believe they are Berkshires, but compared with Virginia, I consider them as almost worthless. If Messrs. Allen & Bement, from whom I bought them, will give me one-half the money, that they cost me, they may have them and my hearty thanks to boot.—Whilst, therefore, I cannot take, and never have taken, even when I might have done it, ten dollars for the pigs of the latter, it requires no stretch of conscience whatever to receive ten dollars for all of Virginia's pigs that I can spare. I consider them as good and profitable stock even at this high price.

From the above, it will be seen, that I heartily agree with the General when he says—"there are superior and inferior of this as of all other breeds." And I think I have traced out the line of demarcation with considerable accuracy.—Some few years ago, Mr. John Lossing, of Albany, imported a very fine Berkshire boar from

Reading in England, to which he gave the name of the town from which he procured him. A Mr. Beach, of Ohio, was so pleased with this hog, that he gave two hundred dollars for him, and carried him to the West. There, also, he was regarded as so fine an animal, that a hundred and two sows were stinted to him, during the first year, at ten dollars a piece. I never saw this hog, it is true, but I have seen several of his descendants, and all of them without exception, are really superior animals. My fine sow Virginia is one of his pigs. Dr. Harrison, of Prince George, also owned one of his pigs—a fine boar called De Wit Clinton. This hog, together with some two or three of his pigs were at the general meeting of our Society last fall, and fine animals they were. Mr. Charles B. Williams also owns two fine young boars of the same breed, which fully sustain the high reputation of their sire. There may be others of the same breed in the State, or even in the neighborhood, for ought I know, but these are all I have seen, and I can truly say, that they are all superior animals. In fact, this hog Reading, seems to have arrested the rapid decline of the Berkshires, and to have restored them to their former superiority.

One more remark, and I shall, for the present at least, be done with the General and his communication. He states that his white sow, breeding from two Berkshire boars, produced at each litter a certain number of pigs, some of which strikingly resembled the sow, whilst others as strikingly resembled the boar, and that those which were like the sow, were in both instances, the best pigs; from which, he draws the conclusion, that the sow is the best breed of hogs. The case is a strong one, I will admit. But I really think there is a stonger case existing at my piggery at this very time, from which I draw directly the contrary conclusion. On the 5th day of March last, my sow Virginia produced ten pigs. Now all who have read my hog essays, or are at all acquainted with my hog management, know that I am not in favor of over-breeding my sows with their own broods, and that when I can do no better, I kill the excess until the number to a fully grown sow, is reduced to seven. But this constituted a hard case. My theory or my fine pigs must one or the other be sacrificed, and I was exceedingly unwilling to give up either. From this distressing dilemma I was happily relieved on the second day; for on that day, another sow (nearly but not quite *white*) also produced ten pigs. It then occurred to me that by killing four of the latter, I could provide for two of the former, and then each sow would have eight; and as both sows were at the time in good plight, and especially as I promised to each good treatment, I finally compounded the matter as stated above. I will also mention, that the sire of each litter was the same hog. Here then is a case in which two full blooded Berkshires are placed with six half bloods, and these, half-brothers, to be nursed and reared by the same sow. For two or three weeks, I could perceive but little, if any difference between them. All were thrifty and grew apace. But after that time, the strong and distinctive points of the Berkshire began to develope themselves in the two strangers in the most striking manner. The six were as tall, and perhaps taller, but it was merely their *long legs* which made them appear so. The Berkshires had a firmness of hair, and a breadth on the back, a roundness and symmetry of body, to which the others, receiving their nourishment from the same source, were utter strangers.

I would not state this case with so much confidence, were it not that I have tested it by the strictest scrutiny. Among other expedients to which I have resorted, this is one. When visited by a number of my acquaintances (I will give their names if desired) I have conducted them to the pen, and merely told them that there were two full blooded Berkshires among the pigs, and asked them if they could point them out. In no instance did they fail to do so, and generally without any hesitation. Another fact I think still more striking. Two butchers came to buy some roasters. They were also taken to this pen, but not informed of the difference, and after surveying the pigs with the eye of a butcher, they offered me a dollar for the Berkshires, but would give only seventy-five cents for the others. Thus, in the judgment of the butcher, who buys merely to kill and sell, a *full* Berkshire pig is worth thirty-three and a third per cent. more than a *half* Berkshire. I need scarcely say that the butcher and I could make no bargain, for one of the pigs was already engaged at ten dollars, and the other I intended to keep for my own use. J. H. Turner.

We said we expected a "rating;" although we could hardly divine the objection that could be made to the part we took in Gen. Richardson's attack upon Berkshires. To tell the truth, we felt, afterwards, that we deserved one for saying so, because we had no right to presume that any one would do us the injustice of finding fault with us for a manifest discharge of duty; but we founded our calculations upon the blindness of prejudice, even in the best of mankind, and the source of this attack proves that we did not err in our calculations.

We believe not only that error is powerless, when truth is left free to combat it, but that truth itself emerges from obscurity into light in the conflict. It is for this reason, that we invite free and liberal discussion. Our desire, our duty,

is, to get up a conflict and then act the part of an impartial conductor between the combatants. We afford the arena, our correspondents conduct the game, and the public keeps the score. We thought some verbal remarks of Gen. Richardson's would lead to a conflict that would redound to the benefit and amusement of the spectators; we persuaded him to enter the arena, and when we brought him on the stage, we introduced him with a few flourishes. Although, under such circumstances, we should have been justified by all the rules of courtesy, if we had indulged in a little hyperbole with respect to the *debutante*, yet, in this instance it was unnecessary, and we have not said a word in our editorial about the General that either is, or can be, denied. Indeed Mr. Turner endorses, pretty much, our remarks, but objects that we have on other occasions expressed the most favorable opinions of the Berkshire stock. Suppose we entertain them still; what then? should we, when a gentleman, who had even better opportunities of knowing than we had, expressed an opposite opinion, refuse to publish it, because it differed from our own, or should we even hesitate to *invite* the expression of opinions, because we have expressed others to the contrary; or should we withhold from such a correspondent the poor boon of stating what we know to be true with respect to the circumstances under which he writes?

Yet this is all we did, and what we have done with respect to other subjects, over and over again; what we are bound to do in every case. The fullest and freest discussion is guaranteed, limited only by our opinion of the choice and taste of our readers. We will occasionally express opinions of our own, but we do not think it necessary to reiterate them every time we give room to a correspondent, who differs with us. We have expressed opinions highly favorable to Berkshires; those opinions may have been changed by Gen. Richardson's statements, or they may be still entertained, or they may be held in abeyance awaiting the issue of this controversy. Nobody has a right to know, until we choose to inform them, and no owner of Berkshires has a right to require us, because we have once expressed an opinion in their favor, either to maintain that opinion, in spite of reason, or to express it on every occasion that the subject is mentioned.

The opinions of Messrs. Miller, Hill, &c. was contained in a postscript to General Richardson's communication, and was published just as it was written.

Having dodged the blow that was aimed at us, we leave these knightly combatants to conduct their own contest; they are well matched, and thoroughly versed in the courtly laws of arms; a rich treat may be expected from the encounter.

For the Southern Planter.

It is astonishing how much may be made by applying odds and ends of time to collecting and spreading manure. Whenever a spare hour can be gained, independent of stated seasons, resort should be had to the woods; leaves and trash should be raked into piles, and a little earth thrown on the top. As soon as it is partially decomposed, or rendered fit to answer as a covering to the land, that is, as soon as it is in a state not liable to be carried off by the wind, it should be hauled, at any time or season, upon land designed for the next year's crop. This deposit will operate as a cover to the land, shielding it from the summer suns and the winter frosts, afford food for the growing plants, and greatly improve the land.

From the time that horses are stabled and the cows pounded or stalled in the fall, they should be provided with a plentiful supply of litter. The stables should be cleaned out twice a week, loading your cart from the stable-door, and carrying it out at once upon the field designed for corn in the spring. Thus, the manure can be spread in half the time, and more equally than it could be, if suffered to lie in a pile all the winter. Besides it will be twice as effective. The product of the stable and barn yard during the spring and summer months should be deposited in a convenient reservoir, properly prepared, and intermixed with straw and trash. In the month of August, haul it out upon the field intended for wheat, and spread it before the plough, turning it under to a moderate depth. This process is to be preferred to surface manuring, after the plough; because, when the land is stirred in seeding, the manure will be incorporated with the soil, will preserve the moisture, and greatly invigorate the plant. Whereas, the surface dressing, at such a season, exposes the manure to great loss by evaporation.

To prepare land for wheat, if the soil is deep and loamy, where you have no manure to plough in, plough very deep, mixing a portion of clay, if possible, with the surface mould; harrow level, then, with a single shovel score or furrow it off, at distances of ten inches from centre to centre. The wheat when sown will roll, principally, into the furrows; harrow in the wheat the same way, that is, with the furrows. The harrow, if the soil is light, should be light also, that the teeth

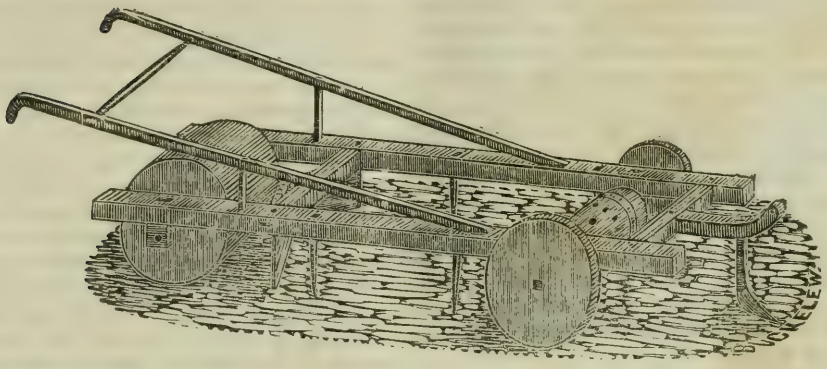
may not reach the grain, and throw it out of the furrows. The wheat will, of course, come up in drills, it will be better protected in winter, will grow off better in the spring, and will make a more productive crop.

Yours, respectfully, S. Davis.

Frederick, Virginia.

We have received another communication from Mr. Davis, in which he states that he has been a farmer, man and boy, for fifty years, and offers us the benefit of his experience on several subjects. We shall always be pleased to hear from such a veteran in agriculture.

DRILL-BARROW.



The engraving is intended to afford a perspective view of a drill-barrow, claimed as the invention of Dr. Horton, of Maryland, and given to the world through the columns of the American Farmer. It is cheap, simple, and we believe well calculated for drilling beet and turnip seed. Any man who can handle a saw and hatchet may make one for himself. The frame work speaks for itself. The side pieces may be made four feet long, two by three. The wheels may be cut out of oak plank one and a half inches thick, and made ten or twelve inches in diameter. They do not revolve upon the axle, but the axle revolves in the journals which support it. To this axle is secured a seed-tight cylinder, made of tin or copper, larger in the centre, and tapering a little to either end. The centre is perforated with holes, two inches apart, large enough to pass a beet seed freely. The seed are introduced through a hole in the cylinder, to which a cork is fitted. A narrow copper hoop with small holes, large enough to pass turnip seed, two inches apart, can, at pleasure, be passed up to the centre of the cylinder and placed so that the holes in the hoop may either be, or not be, over the holes in the cylinder. In the one case, the holes will be entirely stopped, and the seeds prevented from escaping when the implement is moved from place to place. In the other, the holes in the cylinder will be reduced to the size for turnips. Rake-teeth may be inserted, as represented in the engraving, for breaking or removing clods and stones, and the seed may be covered by paddles behind, made to shift to any required angle. The roller is very useful in pressing the earth closely to the seeds.

Our engraver is a long-armed, short-legged fellow, who has placed the handles to suit himself, rather than the generality of mankind; but these of course may be altered to suit the particular form of the operator.

We have known the principle of this machine, as exemplified in the cylinder, used in this neighborhood for some years, with great satisfaction to the owner, and have intended to give a description of it. The copper hoop is new and ingenious; it saves the necessity of having different cylinders for different kinds of seed. The implement we have seen, was divested of the teeth, paddles, and roller; the side pieces in this, constituting the handles of that, which was intended to be rolled forward by a man, for the purpose of dropping the seeds in a drill already made, to be covered by an after process. The Doctor has certainly added to the convenience, although a little, to the expense of the implement.

From the Maine Farmer.

PREVENTION OF SMUT BETTER THAN CURE.

Mr. Holmes,—I observed in a late number of the Kennebec Journal an advertisement of a smut machine, by Messrs. Pratt & Co. (if I rightly recollect the name,) and recommendation of it by Mr. Gardiner, of the town of Gardiner.—From the high respectability of that gentleman, I have no hesitation in giving full credit to his statement. But I would respectfully suggest to him and all others interested in the subject, whether it would not be preferable to prevent smut from growing among our wheat to devising methods for the removal of that foul substance from it. I have for the sixteen years last past, with complete success practised the following method, viz:—Washed the seed wheat, and drained off the imbibed water through a common basket. In this moist condition put it into a tight tub, long box, or trough, and for every bushel so prepared, dissolved two ounces of blue vitriol in warm water, turned it into the wheat, and with a shovel stirred it so that the liquid shall penetrate the whole mass. This may be ascertained by the color. The wheat will assume a greenish cast where the liquor has come in contact with it.

This method of preparing our seed has become almost universal in this neighborhood, and we hear nothing of smut except from a distance. Our most extensive manufacturer of flour, after having satisfactorily tried the experiment, was at the expense and trouble of circulating handbills through the whole region of his customers, three or four or five years *since*, and he informs us that in consequence of the use of this prevention he is not called upon to grind smutty wheat except in some rare instance, and in none where the above method has been practised. I published the foregoing in substance, in an agricultural paper printed in Bangor a number of years ago, and subsequently (if I rightly recollect) in the Maine Farmer, and have seen it noticed in the New England Farmer. Still I am so fully convinced of its importance that I venture to reiterate it. OLIVER CROSBY.

In connexion with the above, we publish the following communication from a very scientific gentleman, whom we hope to recognise as an established correspondent of the Planter:

For the Southern Planter.

In a former communication I addressed some inquiries to our farmers, for the purpose of inducing them to institute experiments to ascertain the cause and nature of the smut in wheat, as upon this information alone can an efficient remedy against the evil be based. Since then I have met with the following, published in the London Medical Gazette for October 8, 1841, which goes to prove the correctness of a doctrine advanced in 1838–9, by Edwin Quekett, F. L. S. published in the same journal for those years, "that ergot," a species of fungus to which rye is peculiarly obnoxious, "was caused by the introduction of the sporules of a peculiar fungus into the circulation of the affected grains, and their final deposition in the seed." If you think the publication of them calculated to do good, they are at your service.

"Twelve grains of rye, of wheat and of barley, all grown in the neighboring fields of Surry, were selected, and placed in a plate which contained a little water—some ergots of wheat were then immersed in the water of the plate, and with a camel's hair pencil brush the sporidia of the fungus adhering to the exterior were detached in numbers, as the microscope proved, and the ergots were then removed.

"A similar experiment was performed with the same number and variety of grains, but with the fungus obtained from the exterior of an ergot of a large grass—*Elymus Labulosus;* a glass shade covered each set of grains thus prepared.

"In a few days germination commenced and was allowed to progress until the grains were beginning to appear wrinkled, from the appropriation of the albumen; and by this time those that had perfectly germinated possessed green leaves from two to three inches in length. In this state the whole of the young plants were taken into the country and planted close together, in the third week of March last.

"The greater number of grains of both experiments, failed in becoming perfect plants, so that at the present time, when they are matured, there are but four of rye, (one infested from the fungus from the elymus and three from the wheat,) three of barley, and four of wheat. On every plant of the rye, there are some plants possessing ergots, (nine having been obtained from the four plants,) some containing one specimen, others as many as six; but in the barley is only one imperfect ergot, and in the wheat not any have been detected.

"It was remarked that, in the rye there was only one ear that possessed a few healthy grains and no ergot; in the others some had ergots without any healthy grains, and the rest possessed neither ergots nor grains of any kind, showing how the fungus probably influences the formation of healthy grains in this plant, whereas, in the wheat and barley the sound condition did not appear to have been departed from.

"If the cause of ergots, in this instance, had an external origin, it is singular that, as the plants grow intermixed and in a very small space, the barley and the wheat should have escaped, under the circumstances; but the reason, I imagine, that the latter two possessed no ergots, though treated as the rye, is that they are not so susceptible of infection; for it is well

known that rye is particularly liable to this disease—more so perhaps than any other grass; and that it becomes so, arises either from constitutional properties or its anatomical peculiarities.

"I conceive, from these experiments that the production of ergot from the absorption of the sporules of the previously described fungus, by the fibres of the roots of the germinating grains, will be found to be the true cause of this singular production; and that when they arrive at the grains, they convert it into the body, known as ergot; for it appears to me too much to admit, in these experiments, that the many ergots on every plant could be the result of accidental circumstances, when it is well known that their presence is very rare in this country on the same grass."

It would seem from these experiments that rye is more under the influence of the particular cause which produces the ergot; but may not wheat be more liable to be acted on by the sporules of the particular fungus which constitutes smut? Should Mr. Quekitt's views of the origin of these maladies in grain be correct, the great importance, of the agitation of seed wheat in alkaline solutions, in preventing these diseases, could at at once be satisfactorily explained. These solutions possess powerful solvent properties and would more effectually remove, by proper agitation, the sporules of the fungus which might adhere to the seed, than any that could be employed. B.

TOBACCO AND COTTON.

We are indebted to the kindness of our friends, Messrs. Cowardin & Davis, for a perusal of a letter, from which we make the following extracts. The house of Evans & Trokes is well known in this city, and their reports command the entire confidence of our merchants.

"*Liverpool, April* 1, 1842.

"The stock of tobacco in the country, and generally in Europe, is too considerable to allow of other than moderate prices; but when to this circumstance is to be added the still more discouraging fact of an uncommon large crop to come forward from the western country, with a full, though inferior, crop from Virginia, there can be but one opinion as to the prospects for the article, as far as its future prices are considered. In strips it is now ascertained that little can be disposed of which does not possess that absorbing substance adapted to the new mode of manufacturing.

"Our cotton market is in the most dismal state. It is most difficult to dispose of short staple, of ordinary and middling quality; and for the better descriptions there is no very lively demand.

"In consequence of the delay which the Corn Bill receives in Parliament, prices of grain and flour have advanced.

Yours, respectfully,

EVANS & TROKES."

SILK.

Mr. John Gill established a silk manufactory at Mount Pleasant, in Ohio, during the year 1838. He now employs twenty hands, and pays them exactly the English prices, at which, the women and girls, who are principally employed in the establishment, make good wages. Last year he manufactured upwards of nine thousand dollars worth of goods, and, although he sells them at less than the price of the foreign article, he managed to realize, under all the disadvantages of a new undertaking, ten per cent. upon his capital. His fabrics are said to be all excellent, and some of them uncommonly beautiful. He exhibited a piece of lustring, which, by good judges, is pronounced to be superior to the best imported.

DISTEMPER.

We find Mr. J. O. Nicholson, in the "Ploughboy," describing exactly the disease to which foreign cattle are subjected with us, and confirming, from trial, the efficacy of the remedy recommended by Col. Hampton, viz: sawing off the horns near the head. The bleeding, which was copious, says Mr. Nicholson, relieved the dulness about the eyes, and were the means of curing my cow. He advises after the bleeding is stopped, to bind cloths, plastered with tar, around the stump as a protection against the flies.

The season is approaching when many of our readers will have an opportunity of trying this remedy. We should be pleased to hear the result.

STEAM BOILER.

The Editor of the American Farmer speaks in the highest terms of "Pickard's Convoluted Steam Boiler," and seems to give it the preference over that of Mott, that has heretofore borne away the palm. The price is not mentioned. The farmer now-a-days is almost afraid to buy a new article, no matter how good, lest a few days should produce another infinitely better.

Richmond Markets, April 21, 1842.

BUTTER—Mountain butter, wholesale 12½ a 16 cents for firkin; 20 cents for roll.

COTTON—8 a 9 cents per lb.

COTTON YARNS—Richmond and Manchester, (factory prices,) Nos. 4, 5 and 6, 19c.; 7, 8 and 9, 20c.; 10, 11 and 12, 21c.; 13 and 14, 23c.; 15 and 16, 24c; 17, 25c.; 18, 26c.; 19, 28; and 20, 28 cents.

CATTLE—For cattle on the hoof, from $4 to $5 50, are the general prices. Mutton—There is great variation in the quality; indifferent sheep bring only from $1 to $2, while the finer qualities bring from that to $5 per head.

CHEESE—8½ a 9 cents per lb.—none in market.

FEATHERS—38 a 40 cents per lb. for live geese.

FISH—Mackerel, No. 3, $6. Herrings—No. 1, North Carolina, $3 50; No. 2, $3; Potomac cut, $3 25. Shad, $7 a $7 50 per bbl.

FLOUR—Demand limited; sales at $5 75—held at $5 87½.

GRAIN—Wheat $1 a $1 10, are prices now paid for good red and white. Corn, 55 to 60 cts. per bushel. Oats, 40 a 45 cents. Very little grain coming into market.

HIDES—Green 5 cts. per lb.; Spanish 13 a 16.

IRON—Pig, $25 to $35; Swedes, $100 per ton. English, $85 to $90; Tredegar, (Richmond manufactory,) $90; Up Country bar, $75 a $80 per ton.

LUMBER—Clear white pine $36; refuse clear 32b. merchantable $22; refuse last sale at $14; flooring $15 a $20 per M.

LIME—Thomaston 95 cents.

MEAL—70 cents per bushel.

PROVISIONS—Bacon—Smithfield $5 50 a 6 50; Western 4½ a 5c—sales slow. Lard 5 a 7c.

PLASTER—On the Basin bank $5 50; at the wharf $3 62½.

SALT—$1 75 from the wharf.

STEEL—American blistered $135 to $140 per ton.

SHOT—6 cents wholesale.

TOBACCO—Receipts continue light. Prices steady. Lugs $2 25 a $2 50 a $2 75. Leaf $3 a $4 50, general sales—better kinds $5 a $7 75. Fine manufacturing $6 50 a $9 75.

FREIGHTS.

NEW YORK—Flour, per bbl. 25 cts.—very little going. Coal, 8 a 8½ cents per bushel. Tobacco, $2 50 per hhd.; boxes 20 cts.; kegs 25 cents.

PHILADELPHIA—Flour, none going. Tobacco, $2 50 per hhd.; 20 cts. for boxes; 25 cts. for kegs, none going. Coal, 7 cents per bushel, Richmond measure.

ON THE CANAL—To Lynchburg and intermediate places, 10 cents per 100 lbs.

EXCHANGE.

FOREIGN—On London 13 a 13½ per cent. premium.

DOMESTIC—New York Checks, 7¾ a 8 prem.
Philadelphia, 7¾ a 8 premium.
Baltimore, 7¾ a 8 premium.
North Carolina Bank Notes, par.
South Carolina, 5 premium.
Savannah, 2 premium.
Augusta, 2 premium.
Alabama, 23 a 25 discount.
Tennessee, 15 discount.
Specie, 6½ a 7 premium.

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THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.* | Tillage and Pasturage are the two breasts of the State. *Sully.*

C. T. BOTTS, Editor.

VOL. II. RICHMOND, JUNE, 1842. No. 6.

For the Southern Planter.

KING WILLIAM WORKING AGRICULTURAL SOCIETY.

At a meeting of citizens of King William County, prompted by the recommendation of the Virginia Board of Agriculture, for the purpose of forming a Working Agricultural Society, at Acquinton Church on the 16th April, 1842, Dr. Corbin Braxton was called to the chair, and Dr. William Gwathmey, chosen Secretary.

A committee appointed to draft a Constitution, reported the plan proposed in the Farmers' Register, December number, 1841; which, with some amendments, was adopted, and a Society organized by the election of Dr. Corbin Braxton, President; Archer Brown, Vice-President; Edward Hill, Treasurer; William Gwathmey, Secretary; and Wm. S. Fontaine, Martin Drewry, Baylor Temple, and George Edwards, an Executive Committee.

CONSTITUTION.

The Agricultural Society of King William County is instituted for the purpose of promoting the improvement of agriculture, and especially to seek that end by inducing the making and reporting of careful and accurate experiments, for ascertaining doubtful, disputed, or new and useful facts in scientific or practical agriculture.

1. The Society shall be composed of such persons as shall sign this Constitution, and pay such contributions as may be required by its provisions.

2. The Society shall have two general meetings in each year, which, until altered, shall be held at Mulberry Hill Tavern, and such special meetings as may be called by proper authority.

3. The officers shall be a President, Vice-President, Secretary, and Treasurer, and four other members of the Executive Committee; the three former being members *ex officio* of that Committee; all to be elected by the annual general meeting, and to serve for one year, or until another election shall be made.

4. It shall be within the power and duty of the Executive Committee to order all things properly in furtherance of the objects of the Society, and within its means; *provided*, that such action of the Executive Committee shall not extend to cases provided for by the vote and action of the Society, and shall never oppose any action or resolution of the Society.

5. The President, Vice-President, Secretary, and Treasurer, shall have the powers and perform the several duties implied by the names of their offices, and both for the Society and for the Executive Committee, of which they are members *ex officio*.

6. Each person on becoming a member shall pay to the Treasurer an admission fee of one dollar, and at each annual meeting of the Society thereafter the further annual contribution of one dollar.

7. Besides any other discretionary or voluntary services, it shall be the duty of each member of the Society annually to commence, and attempt to complete, at least one experiment on some one or more subjects of practical agriculture, on some doubtful or disputed questions, and designed to throw light thereon; which experiments shall be conducted carefully and accurately, to the best of the ability and the means of the experimenter, and the circumstances noted minutely, and with the results, be reported in writing, as simply and concisely as may be, but minutely and fully, at the next annual meeting; and whether the result be deemed successful and valuable, or discouraging, or the whole experiment be deemed a failure. And in default of such reports either of progress or of completion, of three experiments by each member, at each annual meeting, the defaulter shall pay to the Treasurer one dollar for each experiment wanting.

8. The Executive Committee shall prepare a list of practical agricultural matters deemed questionable, and important to be investigated by the experiments of members of the Society, from which, or from other sources, each member may choose subjects for experiment. And the experiments of members shall be arranged and condensed by the Executive Committee, and the facts shown by the results published in the manner deemed most suitable.

9. Of the funds of the Society not less than one-half of the whole amount shall be appropriated as premiums offered for careful and well conducted experiments on subjects of practical agriculture.

10. The Society will co-operate with each and every other Society having similar objects and general action, for the purpose of better forwarding their common and important object of inducing accurate investigation, eliciting useful

facts, and exchanging and diffusing the knowledge thus acquired.

Resolved, That the Secretary be directed to forward a copy of these proceedings to the Editors of Southern Planter and Farmers' Register with the request they will publish them.

(Signed.) CORBIN BRAXTON, *Pres't.*
W. GWATHMEY, *Sec'y.*

It is with great pleasure we insert the proceedings of the "King William Working Agricultural Society," forwarded to us by their Secretary. We are more indebted to King William than to any county in the State for our subscription list, and she is therefore entitled, in a pre-eminent degree, to command our columns.

The plan proposed by Mr. Ruffin, and adopted by this Society, is, we think, excellent in many respects. The feature requiring the members to make and report experiments we think particularly valuable. But we hope the system of public exhibitions will not be abandoned. The object of all such associations is to collect and disseminate knowledge. The mass of mankind are to be addressed only through the senses—seeing is believing. You must let them *see*, and for this purpose, you must collect them together. Our population is sparse, and our material for exhibition indifferent. It is hard to get up, much harder to *keep* up, that kind of excitement that is necessary to induce men to take a long ride to a county exhibition, where nothing is to be seen. More people will pay twenty-five cents to visit a monkey show, than will attend an agricultural exhibition at a County Courthouse. The necessary attraction is wanting. Hence the universal failure of our county societies, notwithstanding their acknowledged beneficial tendency. In this, as in many other things, the difficulty is in the start. Take a county badly cultivated; there, undoubtedly, improvement is needed most. A few individuals, inspired with a love of improvement, endeavor to establish an agricultural society, with an annual fair and exhibition. A few good exhibitions would awaken an interest and excite an emulation that would afford material for others. But how are the first to be obtained? They are never good. They are interesting only from the novelty and ephemeral excitement that may have been produced by great exertion. A few indifferent animals are exhibited, a few plain articles of domestic manufacture are shown, a long speech is made, and the countryman goes home disappointed and weary. The next time nobody attends, and the society sinks into oblivion.

The same difficulty has existed even in the dense agricultural population of Great Britain. How is this to be remedied? We answer by exhibiting in a poorly cultivated district the products of another highly cultivated. Let the Legislature of Virginia appropriate a certain sum to be distributed in premiums of handsome amounts, at fairs to be holden in certain large districts; the fair to be holden at different places in the district in different years. Thus will the improvements of one part of the State be made manifest to, and stimulate another. The ignorant countryman of one part will be satisfied of his inferiority, which will be a great point gained. His sectional pride will be roused, and his pocket-nerve excited. We repeat, "seeing is believing." You may tell men of improvements forever; until they see it, they will not believe that any mode is better than that to which they have been accustomed.

Good premiums will ensure interesting contests, even where pride is wanting; each exhibition will be larger than the preceding; the attendance will be greater; sectional pride will be excited, and the affair will obtain an eclat that will carry it through triumphantly.

This suggestion is derived, in part, from an address delivered before the New York Agricultural Society by Mr. J. B. Nott, which some friend has been kind enough to send us. The present Royal Agricultural Society of England has arisen, Phœnix like, from its ashes in consequence of its being remodelled after the plan of the celebrated Highland Society of Scotland. Like it, it goes forth annually, now to one place, and again to another, to bestow its golden premiums at the ploughing matches and cattle shows it has so wisely established. This, Mr. Nott thinks, is the preservative feature, that is destined to save it from the fate of its predecessors.

COTTON.

It has ever been the policy of England to produce, as far as possible, what she consumes. She has made many abortive attempts to supply herself with cotton from her East India possessions, so as to free herself from the heavy tribute she has been heretofore compelled to pay to the southern part of the United States for this important article. During the winter of 1840, a Captain Bayles, with a party from Mississippi,

was engaged to go out and superintend a cotton establishment in the neighborhood of Calcutta. Various surmises and reports have gone forth as to the result of this new attempt with American skill and enterprise. On the one hand, it is averred that the account from the Mississippi party is of the most favorable character; that already many bales of the finest staple have been sent into England, and that from the cheapness of Indian labor, it is impossible that we can compete with it, when properly managed; consequently, that the production of this great staple must be greatly abridged in America, and that we have no resource but by means of a high tariff on foreign manufactures, to build up a home market for the raw material. On the other hand, it is contended, that these statements proceed from the tariff partly, and result wholly from an attempt upon their part to create a panic amongst the planters of the South. It is said, that the Bayles attempt must, like all others, prove a failure; that the soil and climate of India forbid the production of any but a short, coarse staple, and that the expense of transportation from India to Britain, involving a voyage of three months, is almost as great as the cost of production and transportation from America. Although we greatly doubt the ability of India to compete with our cotton country, we believe that the article has been over-produced, and that a portion of the labor heretofore applied to it may be profitably diverted into other channels.

BREEDING AND RAISING SWINE.

To the Editor of the Southern Planter:

Dear Sir,—As the time seems at length to have arrived, when the attention of our honest farmers is awakened, and inquiry is afloat as to the best method of breeding and raising swine, I hope you will not deny me a place in one of your columns for the little knowledge I may possess, gleaned from agricultural papers and my own observation and experience. For the better treatment of the subject, I shall divide my remarks into six different parts.

1st. The choice of a breed. For my own part, I prefer the Berkshires; they certainly cannot be surpassed for mildness of disposition and easiness of keep, and no other breed marks their progeny as distinctly as they do. Next to them, Mackay's breed is the best.

2dly. Having chosen your breed, select your breeders. I will give you now a description of what I consider a perfect hog. Small head, small ears, thin neck, broad shoulders, long and round in the body, deep in the carcass, short legs, and hams rather square than round.

3dly. The age at which they should breed. Many breeders say they should not go to the boar until twelve months old. I think it would be better for them to run until they are twelve months; but they are plenty old at ten months. The sow should go to the boar more than once, when he has not been used for some time before, or she will have nearly all boar pigs.

4thly. To preserve them in good health and appetite, mix with their food a little pounded charcoal, once or twice a week, or throw it to them in lumps.

5thly. The management and weaning of pigs. For the purpose of feeding little pigs, I have my pens so constructed as to permit them to go into their own apartment at pleasure, where food is always kept for them; they thus become accustomed to eating, and do not mind weaning at all.

6thly. Cures for diseases to which swine are subject. Measles. The existence of this disease can only be known by the animals not thriving like the rest. Give him a clean, dry bed, and mix sulphur or a little antimony with his food. Catarrh in pigs. Castor oil is very good, but wood-ashes is an almost certain cure. Blind staggers are caused by costiveness; give a dose or two of Castor oil. Mange or quinsy. Boil poke root with pot-liquor, and season with meal, vegetables, &c. and let the hog eat heartily; give him this once or twice a week until he is well. As to fattening, but little need be said; the whole matter consists in feeding but little at a time, often, and with regularity.

I hope if you think these remarks will be of service to any of your readers, you will publish them from Your friend, W.

BADEN CORN.

Mr. Thos. N. Baden, of Maryland, who has acquired great reputation for his corn, which he has cultivated into a distinct variety, gives the following directions for its management, in a letter to the Editor of the American Farmer:

"But, Mr. Editor, if your friends will be careful to get the *genuine* seed, and prepare their land well, and lay it off five feet apart each way, and plant it the three or four last days of April, or two or three first days of May, and leave two stalks in each hill—and if the land is rich they may leave three stalks in each hill—and work it once in twelve days, or at most not let it exceed fifteen days, and keep up this rule until they lay by their crop, and pull off the suckers that put up from the roots when they get a foot or eighteen inches high, and they will be certain of raising a good crop, agreeably to the strength of their land. Plough your corn three times after it comes up, and you may work it over the balance of the time as

you please. Some persons contend the cultivator is best, but I differ from them. Let them, however, for experiment, try a part of their field each way; then they will be better able to judge for themselves. I will undertake to say, if they work their field entirely with the cultivator, if it should be a wet season, they will be pretty well overrun with grass; though I use the cultivator sometimes.

If you think, sir, this is worth a place in your useful and interesting paper, you are at liberty to put it in some spare corner.

I am truly yours,

THOS. N. BADEN."

PICKLE VINEGAR.

A friend writes us, "A lady in Orange sent me a nice pot of pickles, last winter, the vinegar of which I think is particularly good, and as she has sent me the recipe, I hand it over to the readers of the Planter."

"Ten gallons water—one gallon whiskey—one gallon molasses—one pint yeast—put all together in a warm situation the first warm weather in June, and in six weeks it will be ready for use. Put a sheet of foolscap paper in the vessel."

GUANO, THE PERUVIAN MANURE.

The rocky coast and inlets that exist in the desert district between Peru and Chili, are the great resort of millions of sea birds, gulls, &c. and their manure which has been accumulating for ages now forms masses of great thickness, and which is constantly increasing. As these birds feed principally on fish, and other marine matters, the *guano*, as the manure of these deposits is called, contains large quantities of phosphates of lime, ammonia, and other products of animal matter, and as it rarely rains on this coast, the masses have not undergone the bleaching or draining they would have done in other places. Thus constituted, this substance is one of the most active of manures; and has for a long time been used by the Peruvians in the culture of corn. A writer in a foreign journal says in passing on horseback along the coast he frequently saw the natives driving an ass or two into the interior, with a package of this guano on each side, and when asked how they used it, they said they put a *pinch* of it in each hill of corn at the time of planting. A number of ship loads of this native *poudrette* have been carried to England, where it commands a high price as a fertilizer, and present indications denote that the importation of the article will hereafter be extensive. The English farmer understands his true interests, when he extends his expenses for manures. From the United States he collects ashes, bones, &c.—from the Mediterranean, crude nitre, soda, &c. and now he has opened the mines of Guano, on the shores of far Pacific, all of which are used for fertilizing the soil, while the same substances, not less needed where procured, are mostly neglected.

TO CLEANSE EARTHEN POTS.

Mrs. Darling, in a letter to a northern paper, upon the subject of preserving butter, insists much upon the necessity of keeping the pots, in which it is put up, perfectly sweet. To effect this, she gives the following directions:

"The pots are cleansed every spring before using, by being wet all over outside and inside and turned bottom upwards in a brick oven immediately after bread or pies have been drawn and allowed to remain until the oven is cold or nearly so. I have known jars cleansed, (that had been used many years to hold soap grease,) by baking two or three times in the above manner, so that they were as sweet as when they first came from the kiln."

SOWING SEEDS.

A due degree of heat and moisture is necessary for vegetation, and an excess of either is as injurious as a deficiency. Some seeds are more particular than others, and possessing less vegetative powers, require more care in their cultivation. We find the following extracts in one of our exchange papers, which we consider well worth the attention of our readers:

On Sowing Flower Seeds.

David Thomas, an experienced and very successful Florist, (N. G. Farmer, vol. 1, p. 56,) remarks:

"For large seeds, like the bean or the pea, a coarse soil is well adapted, as they can force their way to the surface from any moderate depth: but small seeds require different treatment; and we lay it down as a safe rule, the finer the seed, the finer should be the soil.

"How does nature, exemplifying Supreme Wisdom, sow her most delicate seeds? She scatters them on the shady ground, trusting to the rain or the frost to cover them, (of course slightly,) and they germinate before the sun has acquired power enough to scorch them. The dust-like seeds of the orchis and cypripedium sometimes grow in beds of damp moss.

"Common garden loam, whether clayey or sandy, is much improved by a dressing of vegetable earth from the woods, well mixed before planting. If prepared in the preceding autumn, and pulverized by the frost, all the better.

"Such a soil is favorable to seeds of almost any kind, but *essential* to the finer and more delicate sorts. The preparation of the soil alone, however, is not enough. Fine seeds may be smothered if covered from more than one eighth to half an inch deep; and their short roots may be parched if exposed to the sun except in morning and evening. To a *fine soil*, therefore, we must add the protection of *shade*, and in time of drought, a regular supply of *moisture*. If the seeds are sown in an open border, a sprinkling of water in the evenings is best, but carefully abstain from applying so much as will bake the ground."

On Preparing and Sowing Onion Seed.

W. Risley (N. G. Farmer, vol. 2, p. 38,) says:

"First soak the seeds in water from six to twenty-four hours—some seeds being slower to admit moisture than others, is the difference in time required. After soaking, drain off the water, and mix the seeds with a sufficient quantity of earth to absorb the moisture remaining on the seeds; stir them often that they may vegetate evenly, and keep them in a moderate degree of warmth and moisture until they are sprouted, when they are ready to put into the ground. If the weather should be unfavorable, put the seeds in a cool place, which will check their growth.

On Soaking Mangel Wurtzel Seed.

J. Rapaljee (N. G. Farmer, vol. 1, p. 149,) says:

"I prepared half an acre of land for mangel wurtzel, and obtained the seed from your agent at Canandaigua. After soaking the seed one day, I commenced sowing; but rain came on, and the soil being rather clayey, it was a whole week before I could sow the remainder. The seed was soaked all this time, and supposing it was spoiled or injured, I sowed it thicker than usual, and had not enough to finish the ground. Accordingly I sent to the same place and got more seed, and sowed the remainder without any soaking; so that part of my ground was sowed with seed soaked one day, another part one week, and a third part not at all.

"Now for the result. The part soaked one week, came up first, and much too thickly; the part soaked one day, came up slowly and very thinly; while the part not soaked, did not come up at all. Thus showing conclusively, the necessity of thoroughly soaking these seeds, and the little danger there is to be apprehended from soaking too long. I am confident that inattention to this subject, is the most frequent cause of the failure of the mangel wurtzel and sugar beet seeds."

William Garbutt, (N. G. Farmer, vol. 1, 20,) says:

"Much complaint is sometime made of mangel wurtzel and sugar beet seed failing to grow. These seeds are not quite as sure of vegetation as some kinds; still, if rightly prepared, and sown when the ground is in good condition, before the weather becomes too dry, they will very seldom fail. The seed should be *soaked* in soft water, standing in a warm place, *for three or four days* before sowing. The shell of the seed is very hard, and requires a long time soaking for it to become softened so that the germ can burst it open. I have sometimes known it fail after being soaked, owing to late sowing and dry weather."

Planting too Deeply.

In vol. 1, p. 97, W. R. Smith states that he "planted half an acre of mangel wurtzel with two pounds of seed from the Rochester Seed Store. In a few days some scattering plants made their appearance. . . . . Well, nearly two weeks after, I was surprised to find a fair number of plants just peeping through, and from their weak and thin appearance, evidently wearied with their journey to the surface, which they never could have reached, if the soil had not been light."

Parsnip, Carrot, Celery and Parsley Seeds are all slow to vegetate, and if sown late and dry weather succeeds, they will not often come up. These seeds should be sown early, in fine soil, rolled or pressed down and kept moist. Mr. Geo. Sheffer of Wheatland, raises large quantities of carrots for feeding. He soaks the seed forty-eight hours, then rolls it in plaster, and when sown covers it from one-half to three-quarters of an inch deep.—(N. G. Farmer, vol. 2, p. 181.)

Cucumber, Mellon and Squash Seeds, seldom lose their vitality by age or otherwise, but when sown they often fail to grow, owing to the ground being cold or wet. These, and some other seeds, will invariably rot if sown too early—before the ground is sufficiently warm.—*Lima Beans and Sweet Corn* often fail from the same causes.

Egg Plant Seed will not vegetate in the open ground—it requires a good hot bed.

Locust Seed must be thoroughly scalded, by pouring boiling hot water and letting it soak twenty-four hours.—*New Genesee Farmer.*

HORSE RADISH FOR ANIMALS.

Austin Randall, Esq. of Paris, writes to us as follows: "I have seen in your excellent paper no notice of the value of the horse radish for cattle. I have found it very useful for them. If given to cows in doses of a pint at a time once a day, it will materially aid their appetite, and will prevent or speedily relieve cows of the disease called cake in the bag. I feed it freely to any animal of mine that is unwell, and find it of great service to working oxen troubled with the heat. I have had one ox that would eat

greedily a peck at a time. Few animals refuse it; and if they do, it may be cut up and mixed with potatoes or meal." Mr. R. cultivates his corn without hilling, and his success with his last crop (73 bushels per acre) is a favorable commentary on the practice.—*Cultivator.*

BACHELORS' BUTTONS.

Mr. H. S. Poole, of Boston, has invented a button that needs no sewing, and stays on forever. How very difficult it is to procure a great good without a mixture of serious evil; this article, which is spoken of as likely to form a new era in the button line will probably render worthless the laborious calculations of the immortal Malthus on the increase of population; for it is a well ascertained fact that a large majority of mankind get married that they may have somebody always at hand to sew on buttons for them.

CURIOUS ARTS.

Some friend has sent us through the post-office, the following useful recipes, which if genuine—and we see no reason to doubt—are truly valuable, as well as curious. He has our thanks.

1. *A Water-proof Glue.*—Melt common glue in the smallest possible quantity of water, and add by drops, linseed oil that has been rendered *dry* by having a small quantity of litharge boiled in it; the glue being briskly stirred when the oil is added.

2. Glue will resist water to a considerable extent by being dissolved in skimmed milk.

3. The addition of finely levigated chalk, to a solution of common glue in water, strengthens it, and renders it suitable for signs or other work that is exposed to the weather.

4. A glue (or cement) that will hold against fire or water, may be made by mixing and boiling together linseed oil and quick-lime. This mixture must be reduced to the consistence of soft putty and then spread on tin plates and dried in the shade, where it will dry very hard. This may afterward be melted like common glue, and must be used while hot.—*American Mechanic.*

FELT CLOTH.

In one of our early numbers we noticed a new mode of making cloth without the use of loom or spindle, simply by compressure, somewhat upon the principle that a wool hat is made. The inventor of this new article is an American, by the name of Wells, and we see, that, on the occasion of the late christening of the Prince of Wales, the floor of St. George's Chapel was covered with a carpet of the new manufacture. It is described as elegant in the extreme, and the order for a thousand yards was filled in precisely nine days from the hour it was given. The most beautiful kinds, it is said, can be retailed at three shillings sterling per yard. They must inevitably supersede the woven carpets now in use, both on account of their superior elegance and cheapness.

CARE OF FEEDING STOCK.

Swine kept for breeders should never be shifted from pen to pen a short time before littering. They must not be disturbed nor be kept in small pens. When they are allowed to roam at large, they generally seek retired places in the woods, and in such cases they are seldom known to destroy their young by design or by accident.—Let them have room and their accustomed residence at such times.

A little poor wash may be given to the mother in the straw, but she must by no means have rich food till the second day. She will be cloyed and suffer for it for many weeks. She has unnatural longings at such times, and will often satisfy her appetite for flesh by destroying her own offspring. Some good farmers throw them a piece of salt pork at the time of littering.—*Mass. Ploughman.*

THEORIES.

Agricultural theories, in the usual acceptation of the term, or *guesses*, for they are little better, are as plenty as black berries; unvarnished facts are very scarce, and yet, they are the only foundation upon which sound theories can rest; but it is much easier to build *castles* in the air, than to erect an *edifice* upon solid rock.

We wish that agricultural writers would draw the distinction, that is recognised amongst philosophers, between a theory and a hypothesis. The first is a general conclusion, supported by *detailed* and well ascertained facts.

Now an individual may furnish the facts, leaving others to generalize, or form the theroy, or, what is better still, he may furnish the facts, and draw the conclusion from them. He is then a "theorist" proper, and as such, always welcome to our columns. But when he draws a conclusion, without stating the facts upon which it is founded, it is called a "hypothesis" or guess. A hypothesis may do, where a theory cannot be had, but we always exhaust the latter, before we begin to draw upon the former.

EARLY POTATOES.

Those who are desirous of raising early potatoes should place them first in some kind of hot bed and let them remain till the sprouts have grown one inch or more in length. The potatoes may then be carefully removed and set in drills or hills. Rotten manure only should be used for *early* vegetables.

A ready mode of preparing such a bed is to spread the seed potatoes on the grass in a corner of the garden and cover them with horse stable manure three or four inches thick. Straw, or boards, or both, may be placed on the manure to keep it from the sun and the hens. In this mode potatoes may be obtained, fit for use, two or three weeks earlier than by planting them first in earth. Care should be used lest the sprouts be broken on transplanting. If the extremities are left uncovered, leaves will immediately appear, in warm weather.—*Mass. Ploughman.*

OLD FIELDS.

The Editor of the American Farmer suggests the use of *sainfoin* in renovating those desolate tracts of exhausted land in the South, passing under the familiar name of *old fields*. He recommends the following as probably the most advantageous mode of treatment. Sow a bushel of plaster to the acre, turn under two crops of buckwheat the same season, and spread thereon from twenty-five to fifty bushels of lime; then sow the *sainfoin*.

This grass is highly esteemed in England, especially as a renovator. It will grow upon the poorest land, only requiring a dry soil—its roots are great penetrators, and the grass, it is said, will afford good hay and pasturage, when once set, for ten or fifteen years. The celebrated Mr. Coke esteemed it very highly, and used it most extensively as a renovator.

The day, thank God, is passed, when our "old fields" are deserted for *El Dorados* in other lands, and the great question *now* is, what is the most advantageous mode of improvement?

For the Southern Planter.

WHITE BERKSHIRES.

I, for one, Mr. Editor, am amused and instructed by the spirited controversy that has been commenced, and will, I hope, be continued, in the Planter, with respect to the value of Berkshires. We lookers on should be much obliged to both the gentlemen, who are endeavoring to impress the opinions, they no doubt conscientiously entertain, upon the public. The spectator is always allowed the privilege of making a remark upon a game that is played for his benefit, and I will, therefore, say to you, that I have been amused at the antipathy Parson Turner exhibits to a *white* hog. This feeling he entertains in common with almost every raiser of Berkshires I ever saw; no matter how perfect the form of the animal and his ancestors and, if you please, his descendants, if they have been *white* it is enough for these lovers of the black race. Now, sir, although I, in common with southern men generally, have my preferences for color in the human race, I do not extend it to the swine species. I know that white is by some considered a delicate color, and, therefore, objectionable in any animal; but as far as my observation goes, even this opinion is not sustained by facts. The hardiest and most perfect race of men on earth are *white* men; some of the best horses I ever saw have been white horses, and I never heard it pretended that a *black sheep* was to be considered the flower of the flock.

Whence arises this peculiar distaste upon the part of the owners of Berkshires to the white hog? I believe it is derived from the *false* impression, that there can be no such thing as a white Berkshire. What is a Berkshire hog? The ancient hog of England, which runs farther back than the memory of man, was a large, lop-sided animal, but very prolific, and an excellent nurse. Attempts were early made to improve this hog in the different districts in England, as in Berkshire, Hampshire, Yorkshire, &c. The small, compact, eastern hog was the cross generally resorted to, and by this means, great improvements were undoubtedly made in each of these districts. But the breed obtained in Berkshire by the eastern cross, was the one most approved, as uniting the size, fecundity, and nursing properties of the ancient hog, with the compact form and aptitude to fatten of the little China hog. These China hogs were generally spotted with black and white, and the improved Berkshires were found of all colors, but generally distinguished by a tawny ground marked with blackish spots. It seems though, that recourse was again had to the eastern hog to improve the Berkshire. This time the Siamese hog was called in requisition, which being generally copper colored, or black, and always small, reduced the size of the old Berkshire, and gave us the improved form of the modern Berkshire.

This is the sum total of the information that I obtain from Low, Cully, Dickenson, Loudoun, and Henderson. It would be tedious to quote the words of all these different authors, but Low is so clear and distinct, withal so modern and generally recognised as the very best authority, that I cannot forbear to transcribe a paragraph from him. He says:

"The Berkshire was the earliest improved of the breeds of English swine. It has been undoubtedly formed by a mixture of the blood of

the eastern hog with the ancient swine of the country. The great improver of this breed, was Mr. Astly, of Oldstonehall. The modern Berkshire, however, is of less size than the older breed; but still the animals are usually of the larger class of swine. Their common color is a reddish brown with dark spots, but many of the modern breed are nearly black, manifesting their nearer approach to the Siamese character, and sometimes, they are black, broken with white, indicating the effects of the cross with the white Chinese."

Now, let us remember that it is a well established fact in natural history, that although a wild breed may preserve a distinctive color, the domestic animal runs into every variety—let us remember that animals are marked with the colors and qualities of their ancestors more or less remote, and let us remember the variety of breeds, that it seems have gone to make up this compound stock, the modern Berkshire, and tell me, in the name of common sense, why a white or any other color should not be found amongst them. Tell me why a Berkshire should necessarily assume the dark copper color of his *Siamese* progenitor, which Mr. Allen asserts is the invariable characteristic of the genuine breed. That such is not the case, reason and analogy would teach us, and that such is not the case, facts will fully demonstrate. Did Mr. Allen ever see a litter of pigs, from a genuine Berkshire sow by a genuine boar, that were all of the "dark rich plum" color that he says invariably marks the genuine hog; and yet were they not all equally genuine? I am very sure that I have seen genuine Berkshires of almost all colors, and it was but a few days since, that I was called to see a *white* sow pig, belonging to Mr. Sublett, of this city, that will compare with any, in point of form, I ever saw. Mr. Sublett prefers her to any of his crack stock. She is the produce of a pair of *white* hogs, sent out by Wm. H. Gilliott, of Liverpool, to fill an order from a member of a large tobacco firm in this city, for "a pair of the most fashionable *Berkshires*," without regard to expense.

If this article should have the effect of disabusing the mind of any of your readers of what I am inclined to believe, not only an idle but an injurious prejudice, my object in writing it will be fully answered.

Your obedient servent,

A Breeder.

PRUNING AND MANAGEMENT OF FRUIT TREES.

We find the following extract from a letter, written by Mr. E. Phinney, of Massachusetts, to a gentleman in Maryland, in the American Farmer. The directions are from the highest authority, clear, distinct, and, we believe, faultless. How much this pleasing and profitable branch of husbandry is neglected in the South:

"On the subject of *pruning* apple trees, which is your first inquiry, a volume might be written. In a few words, it is difficult to give a good top to a tree unless pruning is begun in the nursery—like too many of our children, if suffered to grow at random in youth, it is difficult to get them in proper *trim* afterward. If, however, this has been neglected, and the top is too thick and limbs interfere and chafe each other, these should all be taken out so that no limbs shall cross each other—and in doing this, regard should be had to an equal balance of the top. A tree with an undue proportion of its burden on one side is more liable to be injured both in root and branch. I have never known an instance of too severe pruning—we are all inclined to let too much wood grow, by which the quality of the fruit is injured. No better general rule can be adopted than to cut out all such limbs as interfere and cross each other; not only those that interfere now, but such as from their direction will be likely to interfere hereafter.

"The best time of pruning is while the tree is growing most vigorously. With us this time is about the first of June—the process of healing then commences quickly, and the wound is not so likely to canker. Where, however, a limb of considerable size is taken off, in order to avoid canker, it is best to cover the wound with a little common mortar, made of sand and lime, and instead of hair to mix with it, I use *bristles*, which are much more durable than hair, and will effectually secure the part from canker, and will remain on till the wound is nearly healed over. In Maryland, I should think the best time for pruning would be from first of May to first of June.

"Thousands of valuable trees in this part of the country have been brought to premature decay and death by pruning in the months of February and March.

"The best manure for apple trees is the top mould and leaves gathered from the woods mixed with a little lime or ashes. Strong manure should not be applied directly to the roots of trees. The best way to promote the health and growth of trees is to keep the ground in a high state of cultivation; let the crop of whatever is planted be well manured and well cultivated, and they will require no other nourishment. Trees will not do well in grass ground if ever so much manured. You may as well plant corn in grass ground as trees. I would as soon lay my trees upon the back log and expect them to grow, as set them in grass land. If the land is tolerably good, fifteen cart loads of stable manure to the acre, spread on and ploughed in, in the spring of each year, will be sufficient for the growing crop, and at the same

time afford sufficient nourishment to the trees. Plough close to the trees; if a root is now and then broken by the plough the tree suffers but little or no injury. Too much manure applied directly to the roots operates like stimulus upon the human constitution, and often induces premature decay. The same manuring and cultivation that will produce a good crop, will give a healthy, vigorous growth to the trees.

E. PHINNEY."

TURNING IN GREEN CROPS.

The following is an extract from an address delivered by the Editor of the Farmers' Gazette before the Pee Dee Agricultural Society of S. Carolina.

The system of green crop improvement, here so ably advocated, is beginning to be a favorite throughout the whole southern country. Millions of labor, we believe, have been used in manufacturing barn-yard manure, that might have been much more profitably employed.

"A few words now as to the mode of fertilizing. This is the most important, if not the only important part of our subject, and would itself afford ample scope for many successive addresses. But time now will allow me only to throw out one or two hints. The common mode of manuring practiced among us is to haul into our stables and lots leaves and pine-straw from the woods, and mud from the swamps. These are, in time, mixed and piled up; and then, after, sometimes more, and sometimes less decomposition, they are hauled out into fields and spread, either broadcast, or in the hills and drills. This mode is copied, with a little modification, from the practice of elder countries, where land is scarce in proportion to labor, and cannot, on that account, be suffered to lie idle, or without a yearly crop for immediate use. In such countries it is necessary and it is also economical; because the price of labor is low and the price of land high. Laborious and expensive as it is, it is also found to be profitable here. But it does not seem to me to be the one best adapted to our circumstances. It is not the one pointed out by nature who works on a large scale; nor the most economical, where the quantity of land bears so great a proportion as it does here to the number of laborers; and where, of course, it can be allowed frequent respite from provision and market crops, for the purpose of producing, on its own surface, materials for its improvement. I could state a number of instances, some coming under my own observation, of manifestly great improvement in land at little cost, by turning in green crops; but as such statements are unsatisfactory unless accompanied by accurate statistics exhibiting with some definiteness the expense, and in some tangible form, also, the degree of improvement, I shall confine myself to a single instance. It is an experiment made a few years since, by a member of this Society, and published in the Southern Agriculturist. Cowpeas were sown broadcast in a field exhausted by previous injudicious cropping, before it passed into the hands of the experimenter, and of a soil adapted to that plant. For the purpose of testing the value of the operation, part of the field was left entirely fallow, and not ploughed. In the fall, wheat was sown in the land, and turned in with the crop of green peas, and where the peas had not been sown, with the natural growth. The wheat which grew on the different portions of the field was accurately measured when harvested, and it was found that the land manured by turning in the pea crop, yielded fifteen bushels to the acre; whilst that on which nothing but the natural growth of weeds and grass had been turned in with the seed, yielded only *one* bushel. Here was a gain of fourteen bushels of wheat to the acre, worth probably eighteen or twenty dollars, from an outlay of a bushel or a bushel and a half of peas, in all not worth, on a plantation, more than from a dollar to a dollar and a half. What merchant, or speculator in stocks, or in cotton, makes a proportionate gain on his outlay? Here was a judicious experiment, conducted by a man who understood what he was about. Account was kept of the outlay and income, and data were procured to be a guide in future operations. If the experiment had been repeated the next year on the same land, the profit would doubtless have been still greater; because the growth of the pea crop, which was the fertilizing substance, would have been much more luxuriant upon the richer soil.

"Let the planter who uses as fertilizers only compost heaps, accumulated from the woods, his lots and his stables, calculate at what expense he can, by *his* process, raise the production of wheat on exhausted land, from one to fifteen bushels per acre, and then choose between the two modes. An important advantage of vegetable over animal manures, in addition to their greater economy, is that the fertility which they impart is more durable. It is chiefly by decayed vegetable matter that the otherwise barren sand and clay which constitute so large a proportion of the earth's surface have been converted into productive soil. Whence else is chiefly derived the exhaustless fertility of the Red River and Mississippi bottoms, and the fertility of all our river and creek bottoms?

"I would not be understood as advising the planter to discard his compost heap. Far, very far from it. As long as it is found profitable let it be resorted to. But what I would suggest is, that a well considered system of green crop manuring be combined with the use of it. In

this way the planter would soon be taught by experience, under what circumstances and to what extent, either should be preferred to the other.

"In green crop manuring nature is made to do the greater part of the work. She collects from the atmosphere, and duly prepares the fertilizing materials, leaving them evenly spread to the planter's hand; and requiring him only to turn them in. The quantity of vegetable matter which may thus be accumulated, by a proper adaptation of the plant to the soil, almost exceeds credibility; especially after the land has been much improved; in which state manuring pays best. More than 200,000 lbs. of green corn has been cut from a single acre in one season."

CORN-FODDER.

The Editor of the Connecticut Farmers' Gazette strongly recommends the sowing of corn for hay. He says it has long been practised by the dairymen in his neighborhood, and, that it is not only preferred by the cow to any other hay, but is more productive of milk than any food that can be given them. It is much used for soiling, and for this purpose is sowed at successive periods, that a cutting may always be had during the summer months. Where it is to be cured, however, he recommends that it should be permitted to mature, because, in that state, it is more nutricious, and much more easily cured and preserved than when it is cut green. If imperfect ears are formed, so much the better; by this process, the stalk may be injured, but the grain will more than make up for the difference. On the mode of cultivation and curing he gives the following advice:

"Many persons advise to sow it broadcast, in which case it admits of no after-cultivation, and the weeds, if the land is rich, will check its growth and fill the ground with their seeds. It is best to sow it in drills two feet apart, and quite thickly in the drills, scattering the seed over a space in the row, six inches or a foot in width. It may then be ploughed or passed through with a cultivator once at least; and in a measure kept clean from weeds. It is believed that as much fodder may in this way be obtained from an acre, as if sown broadcast.

"In putting away corn-fodder, we have found it advantageous to insert occasionally, layers of wheat-straw. The sweet flavor of the corn-fodder is communicated in some measure to the straw; and the straw serves to keep the corn-fodder from being injured by heating. No fodder suffers more or sooner from wet or rain than corn fodder. Every possible pains should, therefore, be taken to avoid this; and it is a good way to hang as much of our corn-fodder, as we have room for, on the beams and on poles extended over the barn-floors, and in sheds where it will be out of the reach of the cattle.

"As to the kind of corn to be sown, the Southern gourd-seed or the Western corn, will undoubtedly give the largest weight; but much of it will be in the butt, no part of which will the cattle eat. Our common Northern small flint corn will yield a large amount to the acre, as it will bear thick sowing; and the main stalk is not so large but that a good deal of it will be eaten, especially if cut up."

VEGETABLE IVORY.

It is said that the French discovery ships have introduced, from the South Seas, a new vegetable, resembling the cocoa-nut, but much smaller. When the outer shell is removed, the interior presents the appearance, and possesses all the properties, of the finest ivory.

In the manufacture of articles to which its size is adapted, it is supposed, that this vegetable product will entirely supersede the more costly tooth of the elephant.

From the Albany Cultivator.

TO MAKE HENS LAY PERPETUALLY.

Messrs. Editors,—I never allow cocks to run with my hens, except when I want to raise chickens. Hens will lay eggs *perpetually*, if treated in the following manner. Keep no roosters; give the hens *fresh meat*, chopped fine like sausage meat, once a day, a very small portion, say half an ounce a day to each hen, during the winter, or from the time insects disappear in the fall, till they appear again in the spring. Never allow any eggs to remain in the nest, for what is called *nest eggs*. When the roosters do not run with the hens, and no nest eggs are left in the nests, the hens will not cease laying after the production of twelve or fifteen eggs, as they always do when roosters and nest eggs are allowed; but continue laying perpetually. My hens always lay in winter, and each from seventy-five to one hundred eggs in succession. There being nothing to excite the animal passions, they never attempt to set. If the above plan were generally followed, eggs would be just as plenty in winter as in summer. The only reason why hens do not lay in winter as freely as in summer, is the want of *animal food*, which they get in summer in abundance in the form of *insects*. The reason they stop laying and go to setting, after laying a brood of eggs, is the continual excitement of the animal passions by the males. I have for several winters

reduced my theory to practice, and proved its entire correctness. It must be observed that the presence of the male is *not* necessary for the production of eggs, as they are formed whether the male be present or not. Of course such eggs will not produce chickens. When chickens are wanted, the roosters must of course run with the hens. B.

When we met with the above astounding assertion, that the way to make hens lay is to kill the chicken cock, what did we do; resort to Buffon, Wilson, or Audubon? No, we applied to better authority; we went straight to an old lady in this neighborhood, and asked her to solve our doubts, and she informed us, that strange as the fact may appear, it is nevertheless true, that when hens are prevented from running with roosters, they continue to lay without intermission, and never show any desire to go to setting.

Rye paste is more adhesive than any other paste; because that grain is very glutinous. It is much improved by adding a little pounded alum, while it is boiling. This makes it almost as strong as glue.

SUBSOIL PLOUGHING.

But little is yet known in this country of the effect of stirring the subsoil of the fields we cultivate. Our readers well know that in England the practice has been very decidedly advantageous. But there, *under-draining* generally precedes the subsoil ploughing. They have in old England a heavier soil than most of ours, and their skies are more watery than those which bend over New England. Consequently our practices must be in many respects different from those of the English farmers. While we have many spots that require under-draining, it is doubtless true that it would be far from economical to under-drain the mass of the fields of this country. They are, in their natural state, so dry as not to suffer from excessive moisture, while the relative price of land and labor here, the former high and the latter low, compared with English rates, is a sufficient reason why we may infer that a mode of operation which pays well there, would involve us in loss.

The objection against general under-draining, does not lie with equal force against subsoil ploughing. The latter is comparatively a cheap operation, not costing more than from four to six dollars per acre. In the vicinity of Boston, the question may be a very simple one, and settled by a cheap experiment. Will an acre of good land, well subsoiled and dressed with six cords of good manure, produce as much in the course of crops from one breaking up to another, as the same acre would yield if not subsoiled, but dressed with seven cords of manure? This question is not settled here, and it cannot be until years have elapsed. We cannot give facts as yet which will serve as a satisfactory basis of an argument in favor of subsoil ploughing generally. But we saw several different crops last season, upon ground that had the subsoil plough run through it in the spring, and as well as we could judge by the eye, the crops on this land were eight or ten per cent. larger here than on the contiguous land treated otherwise the same. But independently of these imperfect experiments, an argument, and as we judge, a strong one, may be given in favor of stirring the earth below where our ploughs usually run.

Whoever has noticed heaps of earth that have been thrown up where wells have been dug, or where ditches and trenches have been cut, knows that the earth which has been thus moved, is far less barren than similar earth lying in its original state. Simply throwing over soils, increases their fertility. Subsoil ploughing, loosening up the pan, will bring new particles in contact, will facilitate the circulation of air, and cause some chemical action. Where such action takes place, the plants generally find nourishment.

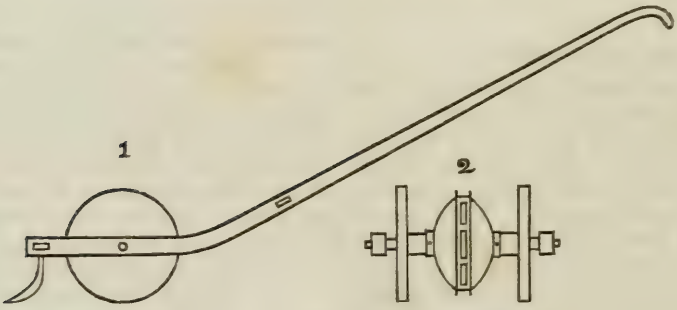
But the most obvious fact connected with this process, and the one which common farmers will most regard, is yet to be stated. Every ploughman knows, that in all old fields which have been ploughed many times, and at a nearly uniform depth, a hard pan or crust is formed by the rubbing of the bottom of the plough and by the treading of the cattle in the furrow. This pan operates to keep the surface waters from descending freely in times of copious rains, and it also breaks up that communication between the upper soil and the subsoil which favors the drawing up of water from below, sponge-wise, in times of drought. It blows hot and cold with the same breath; in other words, if you break up that crust at the bottom of the furrow, your land will be less wet when the great rains come, and will be more moist during the dry periods of summer. The principle is precisely the same as that which lets the water run through the sponge if you put upon it more than it can hold by its attraction, and which at the same time lets the sponge, if not very wet, take up the water to all its parts, if you hold one end of it in water.

This view of the matter is given in the hope that many will be induced the present season to test the value of this operation. Subsoil ploughs of different patterns, may be had of the principal agricultural warehouses in Boston. Mr. Howard has two patterns for sale at Messrs. J. Breck & Co.'s warehouse, either of which will do its work well and to any depth you choose,

not exceeding ten inches below the bottom of the common furrow. But these can be worked only by a strong team; four or six large oxen are needed.

We have a plan for stirring the subsoil a little by the use of a less expensive implement. The land on which we intend to use it, is free from stones, and is rather loose than tenacious. We have looked at the cultivator tooth, and find it six inches long or more. We propose to take a stick of hard wood timber four or five feet long, and insert a cultivator tooth near one end, and the wheel of a plough near the other. To this timber we will fix a handle or handles, and make this answer our purpose on some of our lands. The work will be but imperfectly done—but as we can do this with the team that is needed to plough the surface, we shall adopt it out of mercy to our oxen and our purse. We mention the plan, thinking that possibly some one on some rainy day may fix for himself a simple tool of the kind. We are induced to hope some good will result from this scratching in the bottom of the furrow, partly from a statement made to us by Mr. Bement, of Albany. After he had furrowed or marked out his corn ground last spring, he drew some simple hook or iron prong along in the bottom of each furrow. His corn continued green through the drought, while that in his neighbors' fields rolled and almost perished. The difference in the appearance of this field and others in the vicinity, was so great as to induce travellers to stop and inquire the cause. Mr. B. could assign no other cause than that slight and imperfect subsoiling to which he resorted. This course might be imitated at a very trifling cost.—*New England Farmer.*

DRILL-BARROW.



C. T. Botts, Esq.

Dear Sir,—In the May number of your paper there is "a perspective view of a drill-barrow, claimed as the invention of a Dr. Horton, of Maryland," which induces me to send you a drawing of one that is much cheaper and more simple, at the same time that it answers perfectly well for sowing any kind of seed which any other kind of drill can sow. This I can certify from the actual use of for several years. The only thing about it which I claim as my own invention, is the changeable band or collar, and the mode of keeping it in place. The whole drill is so light that a boy can handle it with ease.

Figure 1 represents a side view of the drill. The handles are 14 inches apart, and 2½ inches wide by 1¼ thick for the distance of one foot two inches from the large end. From the commencement of the curve they are tapered to the small end, and reduced to the size of a common hoe-helve—the whole length of the handles being six feet. The cross bar in front is two inches by one and a half, and is fastened into the handles by tenons one and a half wide by three-quarter inches thick, one of which may project and be fastened by a wooden key or pin for taking the frame to pieces. The cross bar behind the wheels may be smaller, and about one foot from them. As the drill shows in figure 1, the small ends of the handles are elevated two feet four inches from the ground. The tooth in front may be made either of iron or hard wood in any form suitable for opening a small furrow to receive the seed. The wheels are eleven inches in diameter, and made of inch plank, having a square mortice through the centre to fit on the axle with which they turn. The

square part must continue an inch beyond the sides of the wheels, and the ends be made round where they pass through the handles.

Figure 2 represents a front view of the axle with the wheels, and the hollow tin vessel to contain the seed, in the centre. This seed-vessel or spheroid is eight inches high and six inches wide where the axle, which is one and three-fourth inches in diameter, passes through it. The periphery of this vessel is flattened for one and a fourth inches; and on each side of the flat part has a projection or flange one-eighth of an inch high to receive and keep in place bands that fit like a dog-collar. These bands are just wide enough to fit between the flanges, and are perforated with holes of sizes and distances to suit any kind of seed which is ever sown in drills. The figure represents the tin vessel without a band—and it must have five or six long openings between the flanges to allow the seed to be put in, and to pass out through the holes of the band—after it is put on. In using the drill, care must be taken not to fill it more than about one-third full, and to tilt it on one side as the sower turns at the end of each row. The best contrivance I have found for covering the seed, is a common trace-chain doubled, and fastened by the two ends to a couple of nails driven into the upper edges of the handles, just behind the wheels: it covers better than a roller, for I have tried both. The only wear to which this drill is subject, is at the ends of the axle; but if this be made of hard, well seasoned wood, and leather boxes be fixed in the holes through the handles, after they are much worn, I should say that one drill would last during an ordinary life, and ought not to cost more than about two dollars, although it will drill more seed in a day than six or eight men can drill by hand.

I remain, dear sir,

Your sincere well wisher,

JAMES M. GARNETT.

N. B.—In figure 2 the cross bar which holds the little iron for opening the small seed-furrow is not represented.

CURING BACON.

By far the largest portion of our readers reside within the limits of the "Old Dominion;" from many of them, we doubt not, the caption to this article will only elicit the remark, "nobody can tell me any thing about curing bacon." It is very true, that our good old State has acquired a most enviable reputation for the manufacture of this delightful article, and there is no man in Virginia that will not maintain, and argue by the hour to prove, that his mode of curing is preferable to all others. But we think if they would only have the patience to read the following letter from Mr. J. E. Letton, to the "Agriculturist," they would admit that there is something novel if not plausible about his views:

PRESERVING HAMS AND SHOULDERS FROM THE INSECT FOR SUMMER USE.

In my travels through life and east of the Alleghany mountains, I have been always very inquisitive on their mode of making bacon, but found but a small variation from ours. Being a lover of bacon, it is almost my invariable practice when travelling and calling for breakfast or dinner, I would greatly prefer bacon ham; and in my travelling tour through England and Ireland in 1839, I found their bacon to be greatly superior to ours. I will state to you my mode. I believe I have tried and seen tried in my neighborhood, all the methods in practice of our country, and frequently fail, and I must prefer the one herein described (taken from the English.) In England their mode of scalding is very different from ours; as fuel is costly and not many hogs to clean in a general way as we have, they heat their water in a kettle and pour it on by small quantities and cover the pig over with straw so as to keep the heat on—their modes differ—and when cleaned neatly and the animal heat is thoroughly out, then they salt their meat down and let it lie in salt from twenty-four to forty-eight hours; (their salt is much preferable to ours,) then take it out of the salt and brush off the loose salt and hang it up on hooks to their joists in the dwelling-houses of the peasantry, there to dry in the air until about the last of February or the first of March, which is the time the fly (a large gray hairy fly) deposites their egg. You should have your sacks made of cheap ninepenny cotton, large enough to slip over the hams and shoulders and will let the air pass and repass around the ham and shoulder; then draw the top of the sack around the string that your meet hangs by, and tie it tight to keep the fly out. These sacks will last many years by proper care of them. There is no such a thing as smoking of bacon and beef in England; they are very particular in cutting off the feet so as to cut them off below the knee and hock joint, to prevent the air from getting into the marrow of the bone, and keep it moist; and in banging their hams and shoulders up, always to have the hock-end downwards to keep it from draining dry and the meat from losing its sweet moisture. Their beef is not put in sacks; drying steaks are very neatly separated, as the seams through the flesh may show, and that prevents the insect from having much of a place to do any injury. This practice I have put in usage since I returned home. The sacks are three-quarters of a yard long and a half broad, though the size will be owing to the meat; the cost of the cotton sufficient to sack

all my family's summer meat is two dollars and fifty cents; much better than smoking, besides the danger of the fire. I do not approve of my meat lying in salt longer than from five to ten days if the weather is favorable for salt to dissolve; and if it is practicable to hang up I do so; then the meat is not hurt by the impure salt that is used in our land. According to the old Virginia and Marylander's rules they let their meat lay in the salt from six to eight weeks, and that is enough to destroy all the juices that ever were in the meat. Hogs slaughtered in the latter end of November and the first of December, and hung up according to directions, will have nearly three months to dry in the pure air before it is requisite to put it in the sack; a high and well ventilated meat-house is much preferable. There has been many ladies and gentlemen to visit me, and their universal admiration of the fine flavor and red color and mild taste; more particularly they speak of the dry beef not smoked. It retains its juices—in a broiled state. So I must draw to a close by saying if this is found worthy to be placed in your valuable paper, you can do so.

Yours, truly, J. E. Letton.

To many it will prove a recommendation, that Mr. Letton appears to be no scholar. To the degree of credit that such a fact secures, the writer may lay the most undoubted claim; but a man may know how to cure bacon without understanding Latin or Greek, and, possibly, he may slaughter a hog all the better from the skill acquired in murdering the King's English. But, if Mr. Letton's style is a little obscure, and not very elegant, still we think we see the marks of an acute observer and sound reasoner in his communication.

After all, the smoking and salting are entirely matters of taste, about which there is no disputing. We confess that our individual preference coincides with that of Mr. Letton. We greatly prefer our bacon neither too much salted nor smoked, and the richest and juicest ham of which it was ever our good fortune to partake, was served at the hospitable board of St. Julian, the residence of the Hon. Judge Brooke, in the county of Spottsylvania. The Judge, who, not without reason, prides himself upon the unrivalled quality of his bacon, assured us that he never subjected it to the drying and hardening influence of heated smoke.

The value of the canvass bag is well known, although it is generally thought desirable to render it impervious to the air, by a good coating of whitewash.

CABBAGES.

Cabbages are often attacked by grubs, resembling, if not the same, the grubs found in corn and potato hills. These last change, I believe, into brown and yellow beetles. This grub is very destructive to cabbage-plants, but in a different way from the maggot at the root.

The grub attacks the plant in the night, at or near the surface of the ground, and cuts it entirely off. It may generally be found without much trouble and destroyed.

The maggot works entirely under ground—attacks first the small fibrous roots, and then penetrates the main root, where it will generally be found. The first notice you have of this hidden enemy is in the wilting of the outer leaves of the plant, and it soon after perishes and comes from the ground like a dry stick.

The preventive I have used (and I think with good success) is essentially the same, Mr. Editor, with the one recommended by yourself, viz: salt—but in the form of sea-water. I got the idea from the story of some one, who, in a fit of desperation, watered his cabbages with salt-water; thinking, and perhaps hoping, that it would kill them, but which, to his astonishment, resulted in imparting great vigor to his plants. My plants, which were cauliflowers, were fast failing from the attacks of the maggots, and I thought the salt-water could not hurt them more than the maggots; so I applied it to them very freely, (say one quart to a plant, and that repeated several days) and it resulted, as I thought, very favorably. I have also used salt-water for the destruction of aphides or plant-lice on rutabagas, as well as the cabbage tribe, both of which are sometimes much infested with that insect.—*New England Farmer.*

CYMLINS.

We have been requested by a correspondent, who says he has found his account in it, to republish an article on the making of cymlins, from the first volume of the American Farmer. Our correspondent says, "I have pursued the plan therein recommended for several years, and it affords me a supply of the best summer food, not only for hogs but for my milch cows, which are fed with it night and morning. They seem to relish it highly; it improves the quality and increases the quantity of the milk; and may safely affirm, that finer butter and cream than mine, cannot be found, even in the justly famed market of Philadelphia."

The writer, to whom he refers, after citing several cases to prove that the qualities of food are imparted to the flesh of animals in a much shorter time than is generally supposed, infers,

that pork will be "hardened" as well on two weeks as on two months feeding on corn, and thinks, that, during the balance of the time, a much cheaper article might be substituted. He then proceeds to say:

"Hogs as generally managed, are not only the most troublesome, but the most costly flesh we consume, and I have for many years been in pursuit of a plan to lighten the cost of their flesh, which is so absolutely necessary for the establishment of every Marylander. I flatter myself that I now see my way clear, for after two years trial, I am well satisfied, that the use of cymlins, pumpkins, ruta-baga and clover, will enable me to send more corn to market, and with two weeks feeding upon that precious grain, my bacon will not yield to that of any person. No branch of rural economy requires more attention than feeding our various kind of stock. Our northern friends laugh and say, that in Maryland the hogs eat all our corn, and our negroes eat all our hogs. This is too true to be denied, and if my mite can in your opinion be of any use to the public, it is at your service.

"As early as the season will admit, I prepare ground for cymlins, or squashes, (cucurbita verucosa). Rich land is best for all purposes, but in this case, it is the first object to choose a place convenient to your hogs range. After ploughing and preparing the ground in the best manner, lay it off by a single furrow, four feet each way, and at the intersection, manure highly with well prepared manure, mixing it well with the soil, by spade or hoe. Upon this ground so prepared, plant cymlins (and the bunch kind I think best,) in every other row and hill, which will give to you, at eight feet apart each way, about 680 hills to the acre. After planting the cymlins, proceed to plant corn in the rows running north and south, that is, only in one direction, between every row of cymlins, and which being eight by four apart, will give you about 1,361 hills of corn to the acre. It is unnecessary to remind the careful farmer, that the most scrupulous attention should be paid to this ground, while the vines are young, for after they begin to fruit and run, nothing can be done, except to pull by hand, the strong high weeds.—When the fruit appears, be careful to mark for future seed, such as you wish to propagate, for it is desirable to have early fruit.

"The drought of last summer will not be soon forgot, and yet from less than an acre of unfavorable ground, I kept in high condition more than sixty head of hogs of all ages (sucklings excepted); they had not any grain, and but little grass. It was our rule to take a certain number of rows every day, so that there was an interval of five days, and all fruit as large as a man's fist was pulled. It would sometimes happen, that fruit was neglected until it became hard but not dry; in this case, the feeder cracked them upon his cart-wheel. A careful and steady person should be appointed to pull—one who will neither neglect the fruit, or tread upon the vines; for if well managed they will continue bearing until your pumpkins are ready; and these will carry you on to the fortnight before the intended day of killing.

"I claim no merit from the cymlin culture—it justly belongs to Tench Tilghman, Esq. of Talbot, and other gentlemen of that county, but believe me, that while I continue to raise my own pork, I never will omit the cymlin culture. Let us, however, not forget the pumpkin, as an able, and almost necessary auxiliary, and of which there are many varieties; the long yellow is, I think, for many reasons, the best. In 1818 my cymlin patch was small, and as my object was not only to have fat pork but to save corn, I began early with the pumpkins; yet hogs could not be fatter, and my stock of old hams, can yet testify the quality of the meat. Yet, cymlins and pumpkins are not alone a sufficient substitute for corn; some food is necessary to carry you through the winter and spring, until your clover and cymlins are ready. The ruta-baga is an excellent vegetable, which will supply your want. We now know that they are infinitely more nutritious than the common turnip—that they are sufficiently hardy to remain in the ground through the winter, and yet better, if buried in small heaps in a well shaded northern aspect. They will be found in high preservation to July.

"Clover is less injured by hogs than by any other stock, by sheep the most, and hogs after a few days will not root it up; but it is desirable that every farm should be provided with a hog-range well enclosed, uniting wood land for acorns and shade, bottom land for water, rooting and wallowing, and contiguity to clover. Ten hogs will not injure the growth of timber, as much as one cow. The hog indeed eats all the acorns he touches, but in his rootings he buries great numbers to a secure depth: the cow not only nips, and of course kills all the young sprouts of nuts, which she perseveringly hunts after, but she browses upon and tears down young limbs, and rubs and twists young sprouts from stumps.

"If I have extended my remark beyond a mere recommendation of the cymlin culture, and with a view to save grain, which is always a cash article; it is also from a wish to encourage persons who reside upon poor lands adjoining extensive wood-ranges, to turn their attention to rearing hogs upon a large scale.

"For the cymlin, pumpkin, and ruta-baga, but little land is necessary, and for the two first articles, but little manure. Clover is certainly of great service, but if there is plenty of the

other vegetables it may safely be dispensed with. I would give you my opinion of the quantity of ground necessary for twenty hogs, but fear I have already trespassed on your time.

"I must, however, observe, that instead of washing my bacon with warm water previous to hanging it, I have experienced the best effects from washing with a strong lie, made from clean hickory ashes.

I am respectfully, yours, &c.

A Subscriber."

RECIPE FOR THE CURE OF FISTULA IN HORSES AFTER IT HAS BROKE AND RUN.

Some time last summer, my father had a mare that had the fistula very bad, and finally he concluded to try an experiment on the disease. He first made a wash for her shoulder out of elder, (*sambueus canadinis*,) wild cherry tree, (*prumey birgemanus*,) sassafras root, (*laucus sassafræ*,) equal parts of all, and boiled them on a hot fire for a half an hour. After cooling, he washed the eruption well and filled it full of saleratus, working it in with his fingers. On the third day, under this treatment, the disease resumed a considerable change; and in the course of ten or twelve days the mare was cured.

Wm. R. Thompson.

Greenup Co., Ky., Feb. 15, 1842.

Kentucky Farmer.

MANURING WITH GREEN CROPS.

The Editor of the American Farmer, for whose opinions we entertain the highest respect, has taken up this subject, and handled it with his usual ability. He recommends Buckwheat, as the best known crop for turning in; first, because of the size and construction of its leaves, which peculiarly adapt it to abstract the fertilizing properties of the atmosphere; secondly, because, from the shade afforded by its luxuriant growth, it is one of the best cleansers of land, and never fails to eradicate noxious weeds from the soil; and thirdly, because, it will flourish luxuriantly even on poor soils, that most need its renovating qualities. He adds:

"The process of ploughing in buckwheat, should be preceded by *rolling;* and before the plough is set to work, we would advise, that a few bushels of lime, say five to the acre, be sown on the buckwheat. By beginning in early spring, three crops of buckwheat might be grown to the blossoming state, and buried in time for sowing either rye, or wheat, and we have no doubt that, by pursuing the course indicated by us, soils measurably worn out might be made to yield good crops of all kinds, and remain in good heart for years—and we would ask, by what process could land be manured at less expense? If there be any, we know it not."

The value of turning in green crops is sustained by Professor Dana, in a reference to a paper, addressed by Mr. John Keely to the Essex County (Massachusetts) Agricultural Society, in 1832.

In this paper, Mr. Keely states, that by repeated ploughing in of the weeds alone, he had increased the crop of rye, upon a light sandy soil, from eight, to forty bushels, to the acre. He thinks, that in ploughing in the weeds, a furrow should never be turned after the dew has been evaporated, since he doubts not that a large portion of that fertilizing property in the soil, which during the summer months is continually exhausted from the earth, is by the dew brought again within our reach, and it would be wise to avail ourselves of the opportunity to again bring it in the soil. He would, by all means, use a heavy roller after such ploughing. It would fill all the cavities left by the plough, and by pressing the soil more closely to the weeds, at once hasten their decomposition, and very much retard the evaporation of the soil.

Mr. Keely turned in as many as three crops of a season; though he attributes much of his success to the manner in which he put in his rye; this he effected by ploughing a small strip of land, sowing the seed immediately upon the furrow, and then harrowing in. Sowing the seed immediately after the plough, he considers, very advantageous to the crop. The ground being then moist, causes the seed to spring immediately, and gives a forwardness and vigor to the plants, which they ever afterwards retain.

TO STOP THE EFFUSION OF BLOOD.

Messrs. Editors,—In answer to an inquiry in the last number of the Cultivator, respecting a remedy for stopping blood, I will relate two instances of the application of cobwebs, with instantaneous and complete success. The first was a cut just below the fetlock joint of a young horse, from which a stream of blood of the size of a knitting needle spirted very swifily. A small wad of cobweb from the cellar was bound on, which *entirely* stopped the blood in an instant. At another time on bleeding a horse in the mouth, the incision was made deeper than was intended, letting more blood than was designed. After other remedies in vain, the above application was made with the same effect as in the first case.

H. Milton Hart.

Cornwall, Ct., Feb. 23, 1842.

BEETS.

The Editor of the "Farmers' Cabinet" thinks it probable, that many of the objections, that have arisen to the cultivation of the sugar beet, arise from the fact, that the white Silesian, commonly used, is unsuited to a climate so hot and dry as that in many parts of our country. He says, its cultivation is confined to the northern parts of France, the more southern having been found inimical to its proper development. He suggests, that a variety, known as the *yellow beet*, of which the seed may be had in Philadelphia, although for particular reasons less suited to the making of sugar, contains as much nutriment, affords as large a yield, and is probably better adapted to our soil and climate generally.

Mr. Pedder was very instrumental in introducing the beet culture into America, and although he favored the white Silesian on account of its sugar properties, he obtained, long ago, the yellow variety from France, which he then recommended as a food for stock.

From the Nashville (Tennessee) Agriculturist.

KENTUCKY BLUE GRASS (GREENSWARD, POA PRATENSIS.)

The best time for sowing is as soon as you get ready after October, but if you sow before the middle of March, you may expect a good stand, particularly if the season is wet.

Land.—Old fields, where the sun can exert all his powers, produce blue grass in the greatest abundance, and always of the best quality. The past fall we visited Mark R. Cockrill's farm, and saw old fields on which former occupants were threatened with starvation, yielding the richest grass. It was remarkable that his mares and sucking colts, on these pastures, without grain, were fatter, if possible, than we ever saw "the noble animal" on other treatment. But inasmuch as cultivated grounds are generally used for other purposes, the beginner is informed that woodland, particularly where the timber is not too close, will produce good grass.

Preparation.—If you intend old land for pasture, break up the fields, and sow them in oats in February. Then put ten pounds of blue grass seed, a half a gallon of red clover seed, and if a little timothy or orchard grass be sprinkled on so much the better. The clover, timothy and orchard grass will give a quick pasture and afford protection to the blue grass till it gets a strong hold, after which no other grass can contend with it. If woodland is to be sown, take off the logs, brush, leaves, &c. and if the undergrowth could be taken out, it would be much better. After the land is cleaned, harrow it well, then sow your grass seed at the rate of ten or twelve pounds to the acre, but if you put on fifteen or twenty pounds, you will scarcely ever regret it. The rains will sufficiently cover the seed to insure vegetation.

CORN.

In the May number of the Cultivator, we find the following remarks, on the old question of late ploughing and hilling corn, from Mr. L. Physick, of Maryland, a name familiar to agricultural readers:

"I have noticed an error in the culture of plants and trees, wherever I have been, and I know no better plan to illustrate it than in showing the effect of the error on corn. In the culture of corn, it is usual to work the crop till the tassel is about to make its appearance; this is an error. Whenever the lateral roots of a plant are injured, moved or disturbed, when the stalk that is to produce the seed is matured or about maturing, or whenever those roots are covered to a greater depth at this stage of growth than nature intended, it will produce early maturity and decay; and the yield will be just in the proportion to the extent of the error. If you will take the pains to destroy the lateral roots of a stalk of corn after its having made the last joint on the stock, you will find that it will produce no corn; and if you will displace their situation at this time by hilling, you will get a less quantity of seed than if left alone. If the lateral roots of a stalk of clover are cut off when the seed stock is forming, there will be no seed; and just so with other plants and trees; and the working of them at this stage cannot be attempted without injury. Yet, strange to say, it is almost invariably done. I have never suffered my corn to be worked after one-third of the height of the stalk was attained. I plant close enough to have the corn to shade the ground at this height, so as to prevent the growth of weeds after this last working. I plant two and a half feet square, and leave two stalks in the hill, and I have never missed having as much corn per acre and as large ears as my neighbors; and much more than some of them. I never planted a crop of corn that I had not some kind neighbor or friend to tell me that I would have neither corn nor fodder. Last spring a cropper upon my neighbor's farm planted thirty-five or forty acres in corn, and I about ten acres; our fields adjoining. He planted his corn four feet square, and left three or four stalks in the hill, and worked his crop till it was ready to shoot into tassels. I quit working mine when about two and a half feet high. His field was full of weeds and grass. Mine remained clear of both weeds and grass. When our corn was

husked and housed, he told me that I had from my ten acres nearly fifty bushels of corn more than he had from his thirty-five or forty acres, notwithstanding he told me in its early growth, that I would have no corn. Part of his ground was quite as good as mine.

"A similar and worse effect is produced in the hilling or working of plants in the latter stage of their growth, than takes place in plants and trees when deep planted. A disease is produced that hurries the plant on to early maturity by impeding the proper nourishment, by disturbing or placing the roots below where nature intended they should range for food, as well as depriving the vessels of the stalks thus covered from performing their functions. The stalks being established, it is folly for man to attempt to do that which God alone can do. Deep planting and ploughing the peach orchard after the trees have attained sufficient maturity to produce fruit, is, if not wholly, the principal cause of the disease called the yellows. By ploughing, the lateral roots are either cut, disturbed, or forced to seek food apart from where nature intended, and thus operates as a hill placed around plants, and brings the tree to early decay.

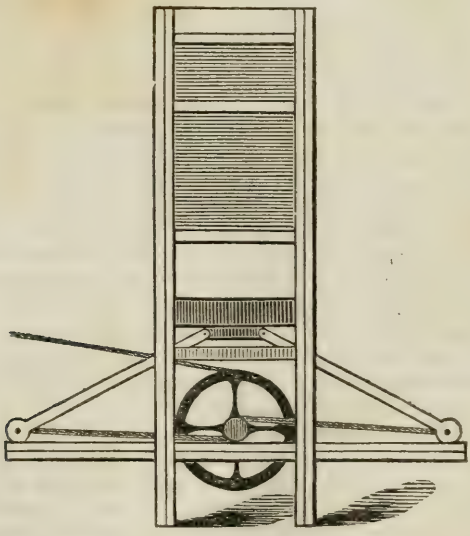
"To conclude this subject for the present, I will say, work your plants and trees while young, so as to form good stalks, and then trust to that all-wise Disposer of events to perfect them.

"I think I noticed a remark in your paper, of the roots of the watermelon being attacked by small animalculæ. Some salt added to the hills before planting will remedy that evil and give you better fruit; and salt and saltpetre sown in the peach orchard, (particularly where the orchard is worked with the plough,) will assist in preventing like depredations to the roots of the peach tree.

"If you think that this hasty notice will be of any service, you are at liberty to dispose of it as you think best, and be assured that I seek neither money nor thanks for performing duties we owe one to another.

LITTLETON PHYSICK."

VAN HOSEN'S PRESS FOR HAY, &c.



Messrs. Editors,—The above cut is an illustration of the patent lever railway press, lately invented by William C. Van Hosen, of Catskill, Greene county, State of New York. The frame and box of this press are like those now in use. It will be seen by the cut, that the lower pannel is left out to show the follower or moveable bottom of the box with the end of the lever attached thereto. At the lower ends of the levers will be seen friction rollers, with a flange on each side to keep it on the track of the railway. Attached to the lower end of the levers are ropes or chains which are drawn in by the roller or shaft of the armed wheel. Upon the rim of this wheel is placed a rope, to which a horse may be attached, or carried to a capstan which is preferable; it will be seen by drawing in the lower ends of the levers, the follower is elevated, carrying up with it the article to be pressed; and when the greatest power is required, it is

given without any additional draft of the horse. The portion of this press giving the power being made of wood, is not so likely to break or get out of order as those made of cast iron. The travel for a horse in running up a bale, if attached to the rope on the arm wheel of five feet diameter, is one hundred feet. If attached to a capstan, it is increased according to size of capstan and length of lever. While in a screw press, the travel is one mile and a half in running the screw up and down.

This press excels all others now in use for pressing hay, cotton, wool, rags, &c. &c. and will be warranted to perform well and do double the work that a screw press can with the same number of hands, with less than half the draft. A small boy can attend the horse, and the running back of the follower with perfect ease. The time required in running up the follower is about one minute. Six bales have been pressed to the hour with ease. Bales weighing over three hundred pounds have been pressed by one man.

The construction of this power is such that it does not require a building expressly for it, as it may be placed in any barn or shed, and the horse may move in any direction or at any distance from it; and when the bale is ready for delivery, it is discharged instantly, and the follower gradually recedes as the hay is placed in the box.

The construction of this power is so simple that any man can make one or keep it in order. For a small expense it can be applied where the screw is now in use, and save much barn room and horse flesh.

There are several of this new style of press now in use in Greene county, and others building in different parts of the counties of Greene and Columbia. One may be examined at the residence of the inventor, Leeds, Greene county, and one at the farm of Judge Cooke, Catskill. The latter is sunken through the threshing floor, and the horse travels outside of the barn.

W. S. Jacks.

Catskill, March 5, 1842.

We copy the above from the Albany Cultivator, because we have had frequent inquiries made for a good hay press. The one here represented is both cheap and simple, although the writer of the article betrays, we think, an ignorance of mechanical principles, when he claims for it an increase of power, with a decrease of space to be traversed by the power. Strictly speaking, there is no such thing as an increase of power. Power is employed either in overcoming a natural adherence or repulsion of particles, and is always the product of nature, unalterable by man. The means of employing this power may, it is true, involve more or less friction, and to this extent only, can one machine be said to be more *powerful* than another. But the resistance by mechanical means may be infinitely subdivided, which subdivision is metaphorically termed an increase of power. Suppose a man were required to move an immense bundle of sticks, in its united shape far beyond his strength; it is evident he might effect his object, if he could untie the bundle, and remove them separately. This is exactly what all mechanical principles seek to effect, it is all that they can possibly effect, that is, to divide the resistance, and thereby remove it, part at a time. But it is apparent, that the more the resistance is divided, the more space must be traversed, and it is therefore folly to talk of greater power, and less space, unless the friction has been greatly reduced. So far from this being the case with Mr. Van Hosen's press, we are inclined to think that the power acts at great disadvantage, especially in the beginning, when, to be sure, it is least required. But notwithstanding this, we like the principle, because this disadvantage can be overcome by causing the horse to traverse a greater space, and because, we think the machine requires less nicety in its construction, and would be easier kept in order, than any we have ever seen. How far Mr. Van Hosen can sustain a claim to his patent, we are not prepared to say; probably, the particular combination may secure it to him, but the principle of obtaining pressure by bringing a broken line into a straight one, or into two parallel ones, is as old as the hills, and is the one used in the common printing press of the day. The wheel and axle, we presume, he hardly pretends to lay a claim to.

We have been led into a more extended comment upon this article than the subject would seem to demand, first, by the great want of a good hay press in this neighborhood, and secondly, by the very erroneous views we have found to exist in the minds of many of our readers upon the subject of "power."

Some of our James River farmers are now reaping a golden harvest from their attempts to supply the Richmond market with Virginia hay. Hay at one dollar and twenty-five cents a hundred, is productive of more clear profit than the cotton crop in its palmiest days, and such are our natural advantages, that we need only a good press to drive the northern hay seller not only out of Richmond, but out of the whole

southern market. It would be as well to state, perhaps, that we have received intimations of a press that is being gotten up in our own State, supposed to be superior to any now in use. We will endeavor to procure a cut and description of it as soon as possible, which shall be accompanied with our candid and unbiassed opinion of its merits.

To the Editor of the Southern Planter.

When at your request (not *persuasion*) I prepared the article, published in the April number of the Planter, it did not occur to me as possible that it *could* lead to a controversy with any one; and I am scarcely more surprised by the communication in your May number from my friend the Rev. J. H. Turner, than at a portion of your remarks upon it. I intended no "attack upon the Berkshires" or on the breeders of that stock, and had I been aware that your object was to "lead to a conflict that would redound to the benefit and amusement of the spectators," you certainly would never have received one line from me. I am not ambitious of notoriety, and have no wish to be *brought upon the stage*, with a few, or many, or any "flourishes" at all.—Your columns (permit me to say) should be appropriated to more interesting and useful matter, than unprofitable controversies too often prompted by vanity or selfishness; and I much regret to find myself compelled to trespass upon them.

As a Virginian, Mr. Editor, and for the important interest to which the Planter is devoted, I sincerely desire that it may be as prosperous and as useful as you desire to make it, and to see it yielding a rich and a proud reward, to your editorial labors. But rely upon it this is not the way to accomplish any of these ends. Some indeed, like the mischievous school-boy who sets two of his fellows by the ears that he may stand by and enjoy the fight may be gratified—but I think the practical farmers who sustain your paper for other and better purposes, will turn from such controversies with disapprobation. I shall, therefore, endeavor so to frame my rejoinder to your esteemed correspondent as to observe all due respect to him, and to afford no occasion for encumbering the columns of the Planter with a reply. My remarks shall be as brief as possible—they are offered with a respectful apology to your readers, with whom it is hoped the necessity of the case will excuse me.*

I confidently leave it to every candid and disinterested reader of your paper, to determine for himself, whether my April number can justly be regarded as any thing but a simple statement of my own opinion founded upon given facts—and whether, as Mr. Turner supposes, I have shown myself, so anxious to recommend Mr. Dicken's hogs. I leave it also to the same class of readers to determine how far his disclaimer of intention "to disparage any man's hogs," is sustained by the communication itself, in which sneers, and disparagement of the *white* hog abound. Indeed a full and sufficient answer to most of his remarks would, I think, be afforded by a comparison of them with the very article upon which he has commented.

But our friend, the President of the Agricultural Society, is fond of an innocent joke, and has travelled somewhat "out of the record" to get at one. Take, for example, the turn he has given to my statement in regard to two litters of half Berkshire pigs, and a pig he purchased of me, which he says "would constitute so knotty a case" that he would not know how to dispose of it were it not that *I* have disposed of it myself. Let us see how the truth of the case disposes of it.

As to the pig Mr. Turner purchased of me, I said, "though a very fine, he is not near so large a hog as the white ones have proved to be."—He says, (and in effect makes me say,) "the *little inferior tawny* pig brought twenty dollars, whilst it took the *four large superior* pigs to bring thirty dollars." Now it will be perceived that I have said no such thing in the sense which is here represented, and that it is not fairly deducible from any thing that I did say.

* Between the Parson and the General, we believe, we are like to get "more kicks than halfpence," as the old saying is. Mr. Turner objects to our first editorial as too partial to the views of his opponent, and the General excepts to the last, as calculated to place him in the ridiculous light of an individual cheated into a controversy, for the amusement of the public.

In the first place, although we know that General Richardson does justice to the motives which lead to the article of which he complains, and that he remains, as he has always been, one of the staunchest and most effective friends of the Planter, still, we think, he does us great injustice in the construction he places upon our editorial. The whole difficulty arises, we believe, from General Richardson's taking it for granted that the controversy, which we desired to get up, was to be a *personal* one. Nothing, as he well knows, was farther from our real intention, nor do we see how such an inference can be fairly drawn from the terms used, imperfect as they are. Had we have formed so low an estimate of the taste of our readers, as to suppose they could be either amused or instructed by a personal controversy, we should certainly have deserved to be likened to something worse, than an "idle school-boy, who sets two of his fellows by the ears, that he may stand by and enjoy the fight." Imperfectly as we may have expressed it, we only intended to express the conviction, in which we are strengthened as the controversy progresses, that both entertainment and instruction might be expected from a discussion of a most interesting subject, conducted by two such gentlemen; nor can we see how the expression of such an opinion can be at all objectionable to any of the parties concerned.

If the General did not see that his article was an "attack upon Berkshires," and that it would, in all probability, lead to a reply in defence of that stock, which is maintained to be the best in existence, we can only say, that it was not our fault that he failed, in this respect, to exercise his usual sagacity.—Ed.

The facts are these. "*The little inferior tawny* pig" was one of the finest I ever saw, as Mr. Turner declared himself when he first saw it at my farm. He was decided in his admiration of it, and expressed also much gratification at the (supposed) prospect of having so fine a stock hog in the neighborhood. I told him it was my intention to send the pig to a valued friend about forty miles from Richmond—he offered a friendly remonstrance against its removal, which, however, was unavailing. The next week afterwards, on meeting with him at the house of a friend, he renewed the subject and asked if I was at liberty to dispose of the pig. I replied that I was, not having actually disposed of him, but intending only, to dispose of him as stated. He then said (substantially) that rather than lose the opportunity of breeding from so fine an animal, he would give me twenty dollars for it—which, as I told him at the time, as I could not afford to refuse, I accepted. *He* fixed the price himself—*I* never offered to sell the pig, or intended to sell him. "The *four large superior*" (*white*) "pigs" readily commanded all that was asked for them—fifteen dollars a pair. Twenty dollars might very probably have been obtained, but that being the price of full bred Berkshires, I *then* supposed there was intrinsically a difference of twenty-five per cent. between them.

Mr. Turner next refers to the names of several gentlemen mentioned by me, and says—"Now here would be another tough case to solve were it not for some stubborn facts which again come to my relief. These gentlemen have tried the white hog, it seems, and most of them have manifested their preference for him by sending their sows to my Berkshire boar, and this they did when their favorite hog was more convenient than the inferior Berkshire."

Here again the truth affords an easy solution of the other tough case imagined by Mr. Turner, and shows that the "stubborn facts" upon which he relies, are no facts at all.

The despised white boar was sold by Mr. Dicken at the Agricultural Fair in May, 1841, to a gentleman from Lawrenceville, and as it afterwards appeared, not one male of that stock old enough for service was left in the neighborhood. It was much more convenient, therefore, to send their sows to Mr. Turner's, than to the county of Brunswick—*but not one of those gentlemen did send to Mr. Turner's, until after the removal of the white boar, and until after a Berkshire boar owned by me had also been sold and removed.* I know nothing of the purchases of half Berkshires stated in Mr. Turner's next sentence to have been made by Mr. Sims—but having seen him and all the other gentlemen referred to but one, I can state upon their authority that they fully concur with me, and that without exception, they regret that Mr. Dicken's *white* boar was not retained for the general benefit of the neighborhood. Another gentleman of high respectability and intelligence, an owner of Berkshire hogs, also declared to me within the last three days that he has ever since regretted *he* did not purchase that very boar "at any price." I quote his own words. As to Mr. Dicken himself—he parted with the animal to avoid "breeding in and in," and very naturally crossed with the Berkshire as the most celebrated hog of the day—but neither he, nor any of the other gentlemen named, are "backing out," as Mr. Turner supposes, and this I also state upon the authority of all of them I have seen.

In the next sentence Mr. Turner adverts to what I said I had heard of a difficulty with the committee last spring, in deciding a premium between Mr. Dicken's boar and his own—expresses regret that I "penned the sentence" and speaks of a compliment to the hog at the expense of the committee. To this I reply, that the cause of his regret is incomprehensible to me—that I cannot suppose any one understood me to speak upon the authority of that committee, (as I certainly did not) or as intending a compliment at their expense. No such intention can fairly or justly be imputed to me. After giving a detail of the proceedings in that committee he adds—"this is all that at present I choose to say of this transaction—if urged to it, I will state more." What more the President may have to say, or wish to say "of this transaction," I cannot conjecture, but I *can* conceive that any committee, however intelligent, might well have hesitated about the award of the premium in the case referred to.

I come now to what he says of my commendation of *his* stock of Berkshires, as to which he has made it necessary for me to be more explicit. That commendation was merely incidental—his being almost the only stock in this vicinity that I am acquainted with—it was intended to include, not the sow Virginia only, but the boar President, raised by Mr. A. B. Shelton, on which Mr. Turner got the premium—an animal not inferior, in my estimation, to any he owns. I also thought some others of his stock good—though not all of it; but as he condemns it as worthless, it is not for me to dispute the point with him.

Furthermore, my commendation of this stock carried with it no intention to "disparage" any other man's stock.

Particular circumstances have heretofore led me to a careful examination into the origin and various crosses of the Berkshire hog. I thought the improvement had been progressive, and was not aware of the "rapid decline of the Berkshires" which Mr. Turner says was arrested by the introduction of the boar Reading. It must be also unknown to the numerous purchasers of pigs from the stocks of Colonel Burfoot, Mr. Shelton and Mr. Sublett, all of them long estab-

lished and celebrated breeders in the vicinity, since the demands upon them still continue, with little or no abatement, I believe.

One more remark upon the President's communication, and I will conclude with some better authority than my own opinions. After referring to my account of the progeny of my white sow bred from two Berkshire boars, he admits that the case is a strong one, but thinks a stronger, in his favor, exists at what he calls his piggery, at this very time. He proceeds to a comparison of the full bred Berkshires with the progeny (half blood) of a "sow nearly, but not quite *white*," which he had constituted wet nurse to two of his Berkshire pigs. Having seen this sow and pigs myself, I cannot conceive how Mr. Turner should have persuaded himself that it is a stronger case than the one stated by me, or even a case that deserves to be mentioned at all. The sow is an ordinary animal, not at all comparable to Mr. Dicken's; and the mother of the adopted portion of her family, is Mr. Turner's favorite Virginia, a very fine full bred Berkshire. It would be strange indeed if there was not a difference, and a very considerable one, between the pigs of the two sows, even, though "the sire of each litter is the same hog." As to his allusion to "long legs" in the progeny of the sow "nearly but not quite *white*," it is necessary for me to say that the *white* pigs spoken of in my April number, were, and are as free from that defect as any full blood Berkshires Mr. Turner ever saw.

Considering his communication fully, it seems to me that he has actually "disparaged" all the Berkshires but his own favorites, much more than I have—so that instead of his taking me to task, I, (being a breeder of that stock,) might with more reason complain of him. But as he is at the head of our valued Society, and I am but an humble private, I must not commit the indiscretion, so I respectfully take leave to retire.

Do me the favor to publish with this, the accompanying extracts from the Fourth and last Report on the Agriculture of Massachusetts.

A parting word to you, Mr. Editor. Though I complain of your remarks as placing me in a ludicrous, if not ridiculous, light before your readers, justice to you requires me to say that I have not, for a moment, supposed you *intended* they should be so regarded—and that I have referred to them to justify myself, rather than to censure you.

WM. H. RICHARDSON.

The following are the extracts alluded to:

"We have been compelled, however, in this as in many other cases, to witness the capriciousness of public favor; and to adopt, with the variation of only a letter, the familiar proverb, and say in this case, that 'every *hog* must have his day.' The popularity of the Berkshire swine is on the wane. It is objected to them by many farmers that they are not large enough, though they are easily made to reach, at fourteen months old, 300 or 350 lbs.; and further, that they do not cut up well; and that the fat on their backs and sides is not thick enough, especially for packing down for fishermen, who would be glad to have their pork all fat, and whom I have seen spread their uncooked salted fat pork, as landsmen spread butter, on their bread.

"The former objection is not made by all persons, as many would prefer for their tables the pork of a hog weighing 300 lbs. to that of hogs weighing 600 lbs. of which I have seen many in our market. With respect to the latter objection, I was half disposed at first to consider it as mere caprice, but that E. Phinney, of Lexington, a farmer in this matter 'not unknown to fame,'—and another most respectable farmer of Franklin county, admit that there is some truth in it; and they, as well as many others, prefer a cross to the pure blood. The impression is becoming general, and the butchers in Quincy market are unanimous in their unfavorable opinion of the Berkshire hogs. They admit that their hams and shoulders are good for bacon; but their backs, where they most require it, have no depth of fatness, and they are, therefore, unsuitable for salting. They are good breeders and nurses. They may be kept, therefore, to much advantage where the object is to raise roasting pigs for market. * * * *

"It is but just, however, to the Berkshires to say, that the unfavorable impression in regard to them, though general, is not universal. An intelligent and very exact farmer at Braintree, B. V. French, has found them to answer his expectations. Upon recently killing a number, he was well satisfied with their appearance, and is of opinion that much of the prejudice which exists against them belongs properly to the impure but not to the genuine race."

THE HANOVER FAIR.

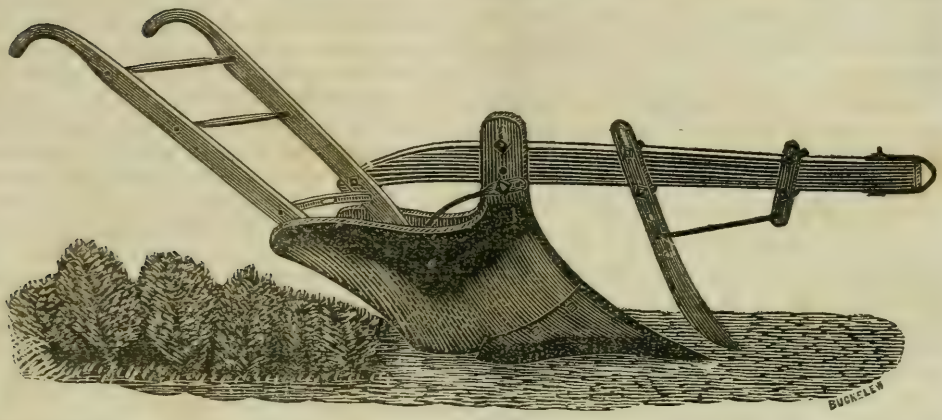
On the morning of the 19th of May, we started for Taylorsville, and were soon borne upon the magic wings of steam from the foul breath of the city into the refreshing air and genial influence of the country. The day was a glorious one, and secured a large attendance of both ladies and gentlemen. Although the exhibition of stock and domestic manufactures was highly respectable, it was from the specimens afforded of the "human face divine," that we emphatically pronounce that "old Hanover" has reason to be proud of her *fair*.

A very neat and appropriate address was delivered by Mr. C. W. Dabney, and the Rev. J.

H. Turner, being called on to address the assembly, afforded the very highest satisfaction, apparently, by some felicitous strokes of satire aimed at the conduct and deportment of the legislators of Virginia.

The whole affair went off with great eclat, and the spirit manifested on this occasion, gives token of that lively interest in agriculture, which has been awakened throughout the length and breadth of this happy land.

WATT'S CUFF-BRACE AND GUAGE PLOUGH.



The plough here represented, is the invention of Mr. George Watt, of Alabama, who has constituted that ingenious and enterprising mechanic, Mr. John Haw, of Hanover, his agent for the State of Virginia. Our attention was first called to this plough at the agricultural exhibition in Hanover, on the 19th of May, where it attracted the most favorable notice from the committee. The peculiarities of its construction are, that the mould board is fastened to the side, instead of the bottom, of the beam. A cuff, made by bending a three-quarter iron bar into three sides of a square, is made to embrace the beam, the ends penetrating the extended upright of the mould board, the whole being secured together by screws and nuts. The coulter is moveable, so that it may be set near to, or further from, or at any angle with, the mould board.

The advantages claimed are, that the position of the beam to one side and out of the plane of the mould board, secures the plough from the common and troublesome objection of choking. This desirable object is said by some good judges, who have tried it, to have been fully attained. It is moreover contended, that the beam, not being weakened by a bolt passing through it, may be made of much less than the ordinary size, and, consequently, with less expense. The stocking, the manufacturer asserts, can be done for one-half the usual price. The handles are fastened in the usual manner by screws and bolts to the heel of the plough; these bolts serve as pivots on which the wood work turns; thus, when the screws of the cuff are slacked, and the handles of the plough are pressed, the beam moving freely through the cuff, the hind part is depressed, and the front elevated, whereby more or less draught is given with the greatest facility. Again, by the insertion of an iron wedge between the beam and the mould board, *land* is given, or taken, at pleasure.

Mr. Watt has published the certificate of some of the most respectable farmers in Hanover, who testify to its great superiority. The lower part of the mould board, it will be readily perceived, may be of any shape or form, to please the fancy of the operator.

Now for our own opinion. We do not see that there is here any saving of expense. The beam, it is true, will cost a little less, but this will, we believe, be more than offsetted by the increased cost of other parts. The landing and draughting have certainly a greater range, and are effected with greater facility than in any plough we have ever seen, but we are almost afraid, that these qualities are obtained at the

expense of permanency and simplicity. But its great boast, and what may render it invaluable to the farmer, is its freedom from choking, which is said to be obtained by the position of the beam. This position is in entire opposition to the centre draught opinions of Prouty & Mears, and would be said by them greatly to increase the draught. But the choking, we are assured by practical men, is relieved, and if this be the case, we believe the plough, if well made, will come into general use. Upon this point we will seek more definite and precise information, which, when obtained, shall be laid before our readers.

Of all the coulters we have ever seen, we prefer the cutter connected with the point, as used in Tinkler's plough.

For the Southern Planter.

King William, April 21, 1842.

Dear Sir,—I have not been unmindful of my promise to report to you, for the benefit of my brother farmers, the result of my trial of the corn and cob crusher purchased from Mr. Obed Hussey, of Baltimore. I regret it has not been in my power to make this communication earlier, but now I have pleasure, both on their account and of the ingenious manufacturer, in stating that the result has been very satisfactory. With the power ordinarily used in thrashing wheat I do not hesitate to say it will grind the ears of corn into good homony more rapidly than any pair of millstones I ever observed at work. The cost in Baltimore is forty dollars with a pair of extra plates, and where one's wheat thrashing box is fixed to work in the house, no further expense is necessary; mine, unfortunately, is made to work out of doors, so I was obliged to incur the expense of a new shaft with a band-wheel on each end, and a new band, &c.—and my machine, now completely fixed to work in the house, cost me near sixty dollars; but I consider it a most valuable acquisition. We have worked it only on rainy days, and find profitable employment for hands, which, in such weather, would be almost eating the bread of idleness, as I do not engage in the culture of tobacco. If Mr. Hussey would make his iron hopper taller and larger for our big southern corn, it would be an improvement for us.

Respectfully, W. Gwathmey.

EDITORIAL.

OUR TERMS.

We have *nominally increased*, really *lowered*, our terms of subscription. That is, we have been induced by the persuasions of friends, and a consideration of the extreme difficulties of the times, to give a credit of sixty days on the price of subscription. Many of our readers, we are proud to say, are taking a warm interest in the Planter, and exerting themselves most manfully to extend its circulation—they assure us, that they have been much retarded in their efforts by the cash feature. Small as the sum is, they say, many, who are willing to take the paper, cannot conveniently spare the money, just at the moment that the application is made. In a few days, when it is convenient, they have not the opportunity of subscribing, and are not anxious enough, to seek it. It is to accommodate such individuals, who generally belong to that class of plain, frugal, practical farmers, amongst whom we are most anxious to circulate the paper, that we have concluded to alter the terms. Now, we wish it distinctly understood, that in every case, where the sixty days is permitted to elapse without payment, we shall most rigidly demand and enforce the payment of the greater sum. Indeed, in no case do we wish, or expect, to put in our own pocket more than one dollar, the original amount of subscription. We have contracted in all such cases to put the claims into the hands of a collector, who is to pay us one dollar a piece for them, and he, we imagine, will be somewhat particular in the collection of all to which the law entitles him.

In truth, the terms of the paper now are, ONE DOLLAR PAYABLE IN SIXTY DAYS FROM THE DATE OF SUBSCRIPTION.

TO CORRESPONDENTS.

We are much obliged to "X." for his valuable article; the nature of the subject must excuse its length. It shall appear in our next.

"A Loudoun Farmer near Leesburg, Va." is informed, that his communication is inadmissible, because it contains imputations against the veracity and fairness of a real name over an anonymous signature. If over his own name he chooses to expose any fraud we have been instrumental in circulating, our columns shall be open to him. In exposing error we discover truth.

We regret that the article from "P. B. W." came too late for the present number. We are always glad to make room for such good practical matter as his pen furnishes. He shall appear in our next.

The experiments furnished by "A Countryman" are so loosely detailed, and we fear, so loosely made, as to be wholly useless.

We would say, to "Aqua," that his communication, although an excellent one, is not exactly adapted to our columns, and that it must yield, for the present at least to a press of *agricultural* matter.

THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.*

Tillage and Pasturage are the two breasts of the State.—*Sully.*

C. T. BOTTS & L. M. BURFOOT, Editors.

VOL. II. RICHMOND, JULY, 1842. No. 7.

We are much indebted to the Agricultural Society of Powhatan for the following very able reports upon the subjects of wheat and tobacco. We submit them to the criticism and comments of our correspondents:

WHEAT.

The Committee appointed at the last meeting of this Society to report upon "the best kind of wheat for cultivation, the best mode of raising it, and the probable causes of the frequent failures of the wheat crop," beg leave to make the following report:

In investigating the subject matter submitted to them, it has been deemed best to invert the order of the inquiry, so as to take up, first the question of "the probable causes of the frequent failures of the wheat crop;" next, "the best mode of cultivating that crop;" and, lastly, "the best kind of wheat for cultivation." This arrangement is made in order to begin at the "root of the evil" of our present system of wheat culture, to endeavor to point out the true nature and causes of that evil, and thence to deduce the remedy, that great agricultural panacea after which we are seeking.

First, then, "what are the probable causes of the frequent failures of the wheat crop" in Virginia, within the last twenty or twenty-five years, for it is only within that period that these failures, at least in this middle region of our State, have become so frequent and so disastrous. In order to arrive at the true solution of this question, it would seem advisable to go back and trace up the history of cultivation, but more particularly the cultivation of wheat, from the first settlement of the country to the present time—to note the original nature and productiveness of our lands when new—the actual crops of wheat then produced—the mode of cultivation then and since—at what time and under what circumstances the product of our lands in wheat first began todecline—the changes of our climate, if any—together with any other facts which might appear to have a bearing upon the question. But your Committee are not aware of the existence of any such history, or even of any such minute statistical facts as would throw light upon the subject. They must, therefore, confine themselves to such *general* facts relative to the history of agriculture in our State, as are recorded in the general history of the country, or to be gathered from tradition or other sources, whence to draw their conclusions in the investigation before them.

It is a fact, generally admitted, that most of our lands at the first settlement of the country, both in the tide water and middle region of the State were much more productive in grain and tobacco than they now are, and that for many years, those lands continued to produce grain crops (wheat included) both abundantly and certainly. It is also equally well known that in lower Virginia, where in the beginning they used to cultivate wheat and tobacco successfully upon their best and alluvial soils, those lands had altogether ceased to yield those crops profitably, until of late years, when they have been resuscitated by the use of lime, and become once more the finest wheat lands in the State. It is furthermore well known to this Society that our lands in this section of country some twenty or thirty years back, when they were then comparatively fresh and unexhausted, yielded crops of wheat in abundance and without fail, whilst we are left at this early day to inquire why it is we cannot make wheat at all.

The failure of our wheat crops has been by some attributed to a supposed change in our climate. Your Committee know of no facts sufficient to authorise the belief that any permanent and material change has actually taken place in our climate. In the oldest records and histories our climate is mentioned as one subject to rapid and extreme vicissitudes of temperature as well as of moisture—the winters sometimes extremely cold, at other times extremely mild; and the summers sometimes hot, sometimes cool—now wet, and then dry—and this we find to be precisely the character of the climate at this day. Nor is it at all philosophic to suppose that any such permanent change of climate can take place in a given region of country as materially to affect the staple crops of that region. We hear of no such changes of climate as this in the oldest countries of Europe, and all the known laws of nature are opposed to any such theory. But even allowing that a change and that a considerable one has taken place in our climate, it would yet remain to be shown that such change exerted any appreciable effect upon our wheat crops. Wheat thrives not only in temperate but in very hot and very cold regions, in Africa and

Siberia, as well as throughout the greater part of the United States—in Great Britain and throughout Europe. It flourishes too in all situations from the level of the sea to the altitude of six thousand feet in favorable latitudes—thus evidently manifesting the beneficial design of Providence to render this great staff of life in a measure independent of the *vicissitudes of climate*, that its bounties might be extended far and wide over the surface of the earth, wherever man shall learn to obey the first law of his nature and live by the sweat of his brow. Further in this connexion, and upon the supposition that a change of climate has taken place which injuriously affects our wheat crops, how is this theory to be reconciled to the fact, that at one and the same time, and of course under the influences of precisely the same climate, abundant wheat crops are now made upon the limed lands of lower Virginia, whilst our crops are failing every year, and getting worse and worse. But we take a more hopeful view of this subject than that which teaches that climate or some uncontrollable or inscrutable agency is the cause of the failure of our crops. We believe that for every evil, moral as well as physical, there is a remedy somewhere in nature; and in the present case, when we shall have discovered the true nature of the evil, and traced it up to its prime causes, then we shall be in the way of finding the true remedy and the mode of applying it. What then is the cause of the failure of our wheat crops? We have just seen that it cannot reasonably be attributed to a change of climate. And we have also seen that when our lands were new, fresh and unexhausted that we had no such failures, but on the contrary, that the wheat crops were then certain and abundant, and that it is only of late years, occurring with the gradual deterioration and impoverishment of our lands, that the wheat crops have gradually fallen off, until now we can scarcely realize a profit upon our very best lands. It has also been shown that this very state of things just described, took place also upon the best lands of the tide water region of Virginia where wheat had ceased to be made to any profit, until of late years these lands have been once more rendered productive by the use of lime as a manure.

Do not these facts *alone* (and many others might be adduced, did the narrow limits of this report allow,) indicate clearly and almost beyond doubt, that the *soil* itself is the medium into which we are to search after the true cause of the failures of our wheat crops? What change then has taken place in our soil sufficient to cause the present failures of our crops? In reply to this inquiry, your Committee are fortunate enough to be able to answer, not in their own language, and upon their own authority—but in the words and upon the authority of the new and celebrated work of Prof. Liebig upon Organic Chemistry as applied to Agriculture. In his chapter upon the Art of Culture and Fertility of Soils, Professor Liebig says, "The first colonists of Virginia found a country, the soil of which had been exposed for centuries to all the influences which effect the disintegration of rocks, but from which the alkalies had not been removed, and which, therefore, was able to afford the means of nourishment to those vegetables which require alkalies for their growth during many years—but harvests of wheat and tobacco were obtained for a century from one and the same field without the aid of manure, until now whole districts are converted into unfruitful pasture land, which without manure produces neither wheat nor tobacco. From every acre of this land, there were removed in the space of one hundred years 1,200 lbs. of alkalies in leaves, grain and straw; it became unfruitful, therefore, because it was deprived of every particle of alkali, which had been reduced to a soluble state, and because that which was rendered soluble again in the space of one year was not sufficient to satisfy the demands of the plants. Almost all the cultivated land in Europe is in this condition; fallow is the term applied to land left to rest for further disintegration. It is the greatest possible mistake to suppose that the temporary diminution of fertility in a soil is owing to the loss of *humus,—it is the mere consequence of the exhaustion of the alkalies.*"

Here, then, is the true solution of the question. The exhaustion of the alkalies of our soils is the cause of the failures of our wheat crops. The alkalies most essential to the wheat crop, and all which are found to exist in the grain and straw are *lime*, potash and magnesia. These, then, are the great and important manures for wheat.

Upon the subject of manure, Professor Liebig says, "In addition to the general conditions, such as heat, light, moisture and the component parts of the atmosphere which are necessary for the growth of plants, certain substances are found to exercise a peculiar influence in the development of peculiar families. *These substances either are already contained in the soil, or are supplied to it in the form of matters* known under the general name of *manures*. But what does the soil contain, and what are the components of the substances used as manure? Until these points are satisfactorily determined, a rational system of agriculture cannot exist. The power and knowledge of the physiologist, agriculturist and chemist must be united for the complete solution of these questions."

Again, he says, "The rules of a rational system of agriculture should enable us to give to *each plant that which it requires for its proper food and development.*" "But agriculture has hitherto never sought aid from chemical principles, based on the knowledge of those substances which

plants extract from the soil on which they grow, and of those restored to the soil by means of manure." And it is precisely this aid of chemical science which Professor Liebig has attempted, and so ably attempted, to apply to practical agriculture.

Having ascertained, by means of chemical processes and analysis, the constituent elements of all *good soils*, and found by the same means in what elements *inferior soils* are deficient, it becomes manifest what must constitute the true manure for these last. Again, as all plants must derive the elementary substances which enter into their organism solely from *two* sources, the atmosphere, and the soil; and as the constitution of the atmosphere remains nearly uniform and unchanged, we need only have regard to the composition of the soil in our efforts to promote vegetation. But there are certain substances which plants can only obtain from the soil in which they grow: these are generally the salts, earths and alkalies—and if any of these, which are essential elements of the plant itself, are not to be found in the soil, then such plant cannot be matured in such a soil.

Now it has been ascertained by chemical analysis, that the straw and grain of wheat contain combinations of lime, magnesia and potash, besides other substances; and if our soils do not contain those alkalies, as it has already been shown that they do not, then we must add them as manure before we can hope again to see our lands produce wheat crops. Professor Liebig says that "in Flanders the yearly loss of the necessary matters in the soil, by grain cropping, is completely restored by covering the fields with ashes of wood or bones, which may or may not have been lixiviated, and of which the greater part consists of phosphate of lime and magnesia." The great importance of manuring with ashes has been long recognised by agriculturists as the result of experience, and in some countries of Europe it is transported eighteen or twenty miles as a manure. Ashes contain also silicate of potash precisely in the same proportion as it is found in wheat straw, besides the phosphates of lime and magnesia, which are ingredients of the grain of wheat.

Bone dust, chiefly composed of phosphate of lime, is also a powerful manure for wheat, and ought to be used together with lime and ashes. Forty bushels of bone dust to the acre, it is said, will be sufficient to supply the soil with phosphates for three crops of wheat, clover, &c. Nitrogen also in some one of its solid combinations must necessarily exist in every good wheat soil, as this substance is a constituent of the gluten of grain. The use of gypsum together with the excrementitious matters of animals, but principally urine will serve to generate and fix in the soil the sulphate of ammonia, from which substance the vital functions of plants can separate and assimilate the nitrogen required.

Hence, then, it becomes apparent that we must add to our soils, besides the manures now in general use, all of which will then become doubly useful, lime, ashes, or bone dust, urine and gypsum. In short, we must give to our land all those substances in some form or another, which are now deficient in the soil, but which are known to enter into the organism of grain and straw, and must, therefore, have been derived from the food of the wheat plant existing in the soil. It would lead far beyond the narrow limits of this report to enter into any discussion of the theory and use of *manures*, however intimately connected with the present subject. Your Committee can, therefore, only refer to the *subject* of *manure*, in the modern and extended acceptation of that term, as elucidated by the science of chemistry and confirmed by experience, as the source from which we are to derive the knowledge necessary to deliver us from the blind guides of habit, prejudice and ignorance which we have so long followed, and to lead us to a knowledge of the true and only means of restoring our worn out lands. And having thus endeavored to show the real cause of the failures of our wheat crops as well as hinted at the remedy, your Committee next proceed to the other questions submitted to their consideration, viz: "the best mode of cultivating the wheat crop?"

This question, like the first, is one of extensive *general* bearing and connection, and if traced back to first principles and followed up through all its relations would be ample theme for a volume—but your Committee are well aware that no such task has been imposed upon them, and that this Society only wants something *concise* and *practical*—the results of experience. In short, the plain practical rules for cultivating wheat to the best advantage in our climate, upon our lands and under the circumstances to to which we are subjected.

It has been attempted to be shown above, and the fact will hardly be denied, that our lands must be improved before we can hope again to cultivate wheat successfully in this part of the country. But a suitable *succession* or *rotation* of crops is acknowledged to be the essentail basis of every improving system of agriculture. We must first, then, begin the improvement of our land, and as the foundation of this improvement, we must fix upon and carry into practice a suitable and liberal rotation of crops.

As to the best rotation for general use upon our high lands, there may be differences of opinion, and it might not be advisable here to recommend any particular rotation for universal adoption. Each judicious cultivator must at last determine for himself, adapting his system to the peculiarities of his soil and other particu-

lar circumstances. And it is not at last any *particular rotation* that can be recommended to all—but that all should adopt, and that forthwith, *some system* or other—and the more liberal the system adopted, the more extended the rotation in the beginning and in the present reduced condition of our lands, the greater will be the improvement in the end—and the more sure shall we be of making wheat in a little while.

The mode at present practised by many of cultivating land in corn, then in wheat or oats, and next year in weeds, or grazed, and again in corn, &c. has already killed most of our lands, and in fact, James River low grounds of the richest kind have for a time been impoverished by this very system.

A five field rotation of three grain crops in five years, (one only of corn) and two years in clover seems to be the system now most generally approved, and is no doubt well adapted to our lands and mode of cropping. The rotation might run corn, oats, clover, wheat, clover—or leaving out oats after corn, two fields in wheat each year—the one after corn, the other on clover fallow—and one corn crop every five years and that after clover.

Upon a six field rotation the land would perhaps improve still more rapidly, and this system might be adopted upon plantations when there is land enough to make corn sufficient upon one-sixth of the surface. Here, of course, each field would go into corn only once in six years—two wheat crops each year, or a wheat and oat crop, and three years in clover and pasture, in the six years. As to the particular manner in which the crops are made to succeed each other in each particular rotation although it is a matter of much importance yet it must be influenced and determined by so many accidental circumstances, that no general rule can be given, and each one must determine for himself.

It is taken for granted in the above remarks that clover and plaster are used in the rotations suggested. To these valuable means of improvement ought to be added all the stable and farm-pen and cow-pen manure each year, either upon the field intended for corn, or upon the clover fallow for wheat, or upon both, if possible, to be aided still further by the all-important manures referred to in the first part of this report. Grazing and trampling are deemed highly important by the most successful improvers of land, in every rotation, embracing wheat as one of the crops. Grazing serves to cleanse the land, and the trampling of stock compacts the soil and beats down and prepares the fallow crop, destroys insects, and otherwise acts beneficially as a preparation for the succeeding grain crops. These means of improvement should, therefore, not be neglected in our attempts to cultivate wheat successfully.

The proper time for seeding wheat cannot be too strongly insisted upon as experience has shown it to be a matter of the greatest importance. In a series of years, the best time for seeding will be found to be between the 10th and 20th of October, and as a general rule, no wheat ought ever to be sown after the 1st of November.

The preparatory ploughing for wheat should always be as deep and thorough as the nature of the soil will admit. The grain should be well covered, and the surface left free of grass, and well pulverized.

No land will produce wheat that is not thoroughly drained. This important process should therefore be well performed.

Where lands have been nearly exhausted, as is generally the case with all our high lands in this country, and it is desired to bring them into cultivation in a rotation preparatory for wheat, it would doubtless be highly beneficial upon our *granite* soils to begin with a naked fallow for one year: that is, break up the land, say in winter, and break it deeply too, if the land has any foundation, say with three horses, and let it lie fallow all summer, being ploughed and re-ploughed in the mean time so as to prevent the growth of grass. This land to be sowed in wheat in the fall, or succeeding spring with oats, and in either case with clover—thence to be followed by the usual rotation. Our soils in this region rest upon, and have been formed by the disintegration and decomposition of granite rock. Granite is composed of quartz, felspar and mica. Felspar contains seventeen per cent. of potash, and mica eight per cent.—both contain traces of lime, besides about thirty per cent. of alumina. By ploughing our lands deep and using the naked fallow, as above suggested, we shall the better promote the decomposition and decay of the rock of the soil, and thus provide a fresh supply of the alkalies so much needed.

But we cannot reasonably hope to restore our lands entirely, and to carry them to the highest pitch of productiveness in wheat and other grain crops, until we give them lime or potash in some form or other. Let us, then, begin the improvement of our lands, by the adoption of a suitable rotation, accompanied by the liberal use of clover and plaster, and the aid of vegetable and animal manure, combined with a more thorough and neater tillage of the earth itself, and let us add to all this a liming of our lands, and then shall we see our country once more teeming with abundant harvests.

As to "the best kind of wheat for cultivation," there can be but little choice in the present condition of our lands, and with our present mode of cultivation, for with these we shall fail, try what kind we may. In truth, most of the wheats now in use have degenerated in consequence of the soil (as explained above) not being in a condition to produce and mature that grain

to perfection, and the consequence is, that the grain becomes more and more imperfect, and n some measure loses its power of regeneration. If there is any choice of kinds, however, the Turkey wheat would seem to be best for rich and alluvial lands or good tobacco lots, and the red shuck beardless is a hardy wheat for ordinary land. For early seeding, say between the 20th and last of September, the Lawler is perhaps the best wheat, as it appears to resist the attack of the fly better than any other kind. The red May wheat is coming into general use, particularly in the lower country, and is worth trying upon good land.

All of which is respectfully submitted.

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TOBACCO.

The undersigned, a Committee appointed by the Agricultural Society of Powhatan, to whom was referred the subject, viz: "The best mode of managing Tobacco from the time it is cut in the field until it is carried to market," having had the subject under consideration, beg leave to present the following report as the result of their deliberations:

In adopting a plan of management for this plant, (one of the most remarkable in the vegetable world) it will be necessary to inquire into its character and properties.

The result of the analysis of the most experienced chemists is, that tobacco contains eight hundredths of aqueous and two hundredths of oleaginous and other matters. Its medicinal properties they deem it unnecessary to mention, they being foreign to the subject before them—the plant being cultivated almost exclusively to be used as a luxury. From this analysis it will be seen that only two-tenths of this plant, then, from its character can be made available; the remainder, being aqueous, disappears in the process of curing. A small portion of the two hundredths referred to, being more volatile than the remainder, changes its character, by the application of heat combined with moisture, and as a consequence, changes the character of the plant, and thereby destroys its beauty and quality. It must be evident, then, that the great secret in curing the plant is that, by practising which, you can retain all (if possible) of this two hundredths of oleaginous and resinous matter, and dispel the eight hundredths of aqueous property.

The plant being supposed to be matured and cut in the field, the first operation is the hanging on the sticks. We advise that it should be done with great care—that each plant be placed perpendicularly on the stick, with space sufficient to prevent one plant from coming in contact with another—it being a matter of importance to give each plant a sufficient space for free evaporation. The second operation is "scaffolding." Your Committee advise that the sticks should be carefully removed to a scaffold, (which should always be near at hand) taking great care that the plant shall not be bruised. The scaffold should be low, so that the tails of the plant may nearly reach the earth,—it being considered highly important to have the radiation of heat arising from the earth at this season of the year to aid in yellowing the plant. After it has remained thus crowded on the scaffold some two or three days, the sticks must be removed from one another at such a distance as to give the plant the benefit of free ventilation. How long it should remain on the scaffold your Committee cannot exactly advise, it being dependant on a variety of circumstances, which they feel at a loss to explain even to an experienced planter. The result of their experience is, that when the pith of the stalk commences to contract, and the stems show a slight degree of contraction, and the margin of the leaves gives evidence of a slight degree of dryness to the touch, that then it is ready to be removed to the house. This mode is advised if it is desired to cure the plant a bright color. If it is desired to cure it a dark color, the same directions should be observed, with this exception, that instead of crowding the sticks upon the scaffold, they should be carefully placed at intervals of about ten inches, the object being obviously to prevent the leaves on one plant coming in contact with those on another, a due regard being had to the size of the plant.

This brings us to the third operation, the "housing," as it is termed. The same particularity and care should be observed in housing as has been advised in the last operation, a departure from which would produce disastrous consequences. By all means avoid crowding, which done, produces "house-burn." By "house-burn" we mean that leaf which presents a red color and dry and lifeless appearance. We believe that it is produced by heat from two causes, crowding and excessive fire. There is a difference of opinion on this subject, and your Committee are well aware of it too, even by experienced planters; but such is our conviction of its truth from close observation that we will almost venture the opinion without the fear of refutation.

The fourth operation is by far the most important branch of the subject before them, "the firing." Your Committee are well aware of the difficulty of removing old and established usages and opinions, and venture on this branch of the subject with great diffidence, as their plan will come in conflict with the usages and opinions of the oldest, most experienced and respectable planters of our State. But the importance of their opinions, (formed from experiment) if true, both as it regards the economy of labor and fuel, (the latter article becoming so scarce in our

part of the State as almost to deter the boldest from the cultivation of the plant,) emboldens them in the stand they have taken, and induces them to recommend the plan to their brother planters. The plan heretofore practised and the general received opinion is, that it requires a great deal of fuel to cure tobacco, and give it that seasoning required to make it stand a voyage to a market. The plan which we recommend, we think, will produce this result with less than one-half of that required by the old plan.

All then that is requisite is to evaporate the water and retain the oil and resinous matters. This accomplished, we should be satisfied—your Committee recommend that the fire should be commenced gradually so that the heat by degrees should be uniformly diffused throughout the house, never in the commencement exceedceeding the warmth of a summer's sun; a greater degree of heat would prove injurious, seriously affecting the oily and resinous properties of the plant. Keep up this fire until the leaf (not the stem) is cured; then let the fires burn out, (they should not be put out.) It will then be left as dry as tinder; let it remain until it gets in soft order, and then commence the fire again, as before directed, and continue it until the stem is cured, so much as to leave it in a safe condition, taking care never to permit the tobacco to get in too "high order," to correct which, should it occur, apply the fire as before directed. We are of opinion that a greater degree of heat should never be applied than 110 or 120, Farenheit thermometer. A greater degree of heat would tend to evaporate the valuable property of the plant, it being borne in mind that all that is required is a sufficiency of heat to evaporate the water, any excess over that quantity must serve to encroach on the oily and resinous property of the plant. One of your Committee, for four years operating on this plan, has uniformly sold his crops for the best prices, and his crops too have uniformly been shipped and no complaint has as yet been heard, (although particular inquiries have been made) that his crops did not stand the voyage. We, therefore, recommend the above plan to our brother planters as making more tobacco with less labor and at least one-half of the fuel ordinarily used.

The tobacco supposed to be thoroughly cured, then comes the process of "striking" or taking from the sticks. We advise that during the month of December all tobacco should be taken down in tolerably soft order, so that striking two plants together to free it from grit will not injure the tails; a bed having been prepared of planks about twelve inches from the floor, place the plants down lapping the tails about twelve inches, and leaving the buts on each side exposed so that they can continue to dry, being careful to leave a space of eighteen inches between the bulks to admit free circulation and permit a man to pass between them, then cover it over with straw, *without weight*, as it strips easier, a weight causing the leaves to adhere.

The next process is *stripping*. The tobacco is taken from the bulk into a stripping room prepared for the purpose, which should be made close, and with a stove the warmth kept as uniform as possible; your hands must be divided into assorters and tiers up, and each assorter should separate the colors and lengths, and when so separated, they pass to the tiers up, who are required to tie it up in such number of leaves, say from six to eight, so that in packing they may be easily grasped and pressed by the hand, taking care to keep the colors separate and distinct, and also dividing the long and short of each color. The lugs should be bundled up in large bundles, without much regard to nicety.

The next process is the "straightening and boxing." The tobacco is taken to the packing room, which we will suppose is well prepared with boxes, in number according to the amount of tabacco made, which we recommend should cube four feet six inches, with a lever attached to each. This size is thought best to give the packer room sufficient to pack with ease; a larger box would prevent the lever from acting uniformly on a larger surface. The packer takes his position in the box and the bundles, after having passed through three or four hands pressed by each and straightened, or handed to the packer, one bundle at a time, who lays it straight in the box. The box should be packed at least half full before any weight is applied with the lever, and when applied, great care should be observed to avoid bruising by too much weight. Keep the colors and lengths in separate boxes. The lugs will not pay for the trouble of boxing, and we advise that they be packed in the hogshead, and prized as fast as stripped. The tobacco should remain in the boxes until it adheres together well; that period will bring the spring of the year—it should then be taken from the boxes for the purpose of getting in prizing order, and instead of the old plan of tieing up with shucks, which is a very tedious operation, and the old plan of hanging on sticks drawn to an edge, which always tended to bend the stems, which, when dry, can never be straightened, we recommend a plan, the invention of one of your Committee, (Wm. Old, Esq.) Two bundles of tobacco should be placed together, and immediately below the tie should be fastened by a string, and two other bundles placed likewise and fastened by the other end of the string, drawing the string tightly, and then laid over a stick from ten to thirteen strings on each stick. The string made of ordinary cotton, sufficiently strong to sustain the weight of four bundles of tobacco, should be twenty-two inches long, the end of each loop made into a running-noose, and

the heads of two bundles caught in each end; they are then hung up in the house with sufficient room between the sticks to prevent their coming in contact; let it remain until it gets thoroughly dry. In the month of March it will get in that order; as soon thereafter as a season offers, strike it down in prizing order, but if you should not be able to strike it in the month of March, and you cannot get a season without the aid of art—then dry it with a moderate fire, such as has been recommended in the curing, until thoroughly dry, and then be careful to strike it down the first season that offers; should you omit it, it will be necessary to dry it again, which should be avoided, as the oftener it is fired and the longer it hangs up, the more loss is sustained in weight. The tobacco should be taken down on the sticks, "cooped" in a bulk, and at convenient seasons thereafter, it should be again boxed in the same manner recommended in the first boxing, taking care to turn the edges of the bundles up (they being flattened by the first boxing) and put on as much weight as you can with the lever. It must remain in the boxes until you are ready to prize. The prizing in the hogsheads after this preparation is one of the simplest operations.

Your Committee present this report with the conviction that they have very imperfectly handled the subject, but they have done the best they could in this brief manner.

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ADDITIONAL.

The undersigned, one of the Committee, agrees with his brother planters and members of the Committee in the general views expressed by them upon the subject submitted for their consideration; but differing with them in one of the most important operations of preparing a crop for market, viz: the curing, he conceives the object of the Society will be best accomplished by stating that difference. He does not know better how to communicate his difference of opinion, than by stating his own plan, which is as follows. He adopts the plan of the Committee in the commencement, and continues it until they stop the fire the first time, at which time he increases his to a high degree, and continues it until the tobacco is cured, or nearly so. By this plan, he has succeeded uniformly in procuring good prices until the last two years, when the objection made by the buyers was, not to the manner of curing, but of prizing. His tobacco has usually held out with the estimate whilst growing. C. SELDEN.

For the Southern Planter.

Mr. Editor,—Allow me to claim a small space in your valuable paper, merely for the purpose of correcting a slight misapprehension of "A BREEDER" in respect to the color of the sow from which is descended the beautiful white pig belonging to Mr. Sublett, referred to in his article in your June number. She was truly (as I am informed) the offspring of a white Berkshire boar, but her mother is *not white*, as your correspondent describes her. She is, to use his own descriptive language, "distinguished by a tawny ground, marked with blackish spots"—a brief yet comprehensive compendium of what Low and others have said of the Berkshire breed of swine. Of the genuineness as Berkshires of both parents I entertain not a doubt, but that they are of a different variety from the black Berkshires I am equally confident, not having been subjected to the *Siamese* cross, which constitutes the peculiar and distinctive characteristic of the last mentioned breed. The sow above referred to is now in my possession. She has a litter of pigs by a very fine black Berkshire boar of the best blood, but not one of them is marked after their sire. They are all spotted after the manner of their mother, and partake of her symmetry and beauty in form and appearance. I hold these in just as high estimation as I do my Berkshire pigs of *Siamese* descent, yet I should not think of sending them to a person ordering in the usual terms, "Berkshire pigs," because they are not of that precise variety I should presume to be intended. They are only *China Berkshires*, while the others are *Siamese Berkshires*. Admit these distinctions and all controversy about white and black varieties would be at an end.

Yours, respectfully,

CH. B. WILLIAMS.

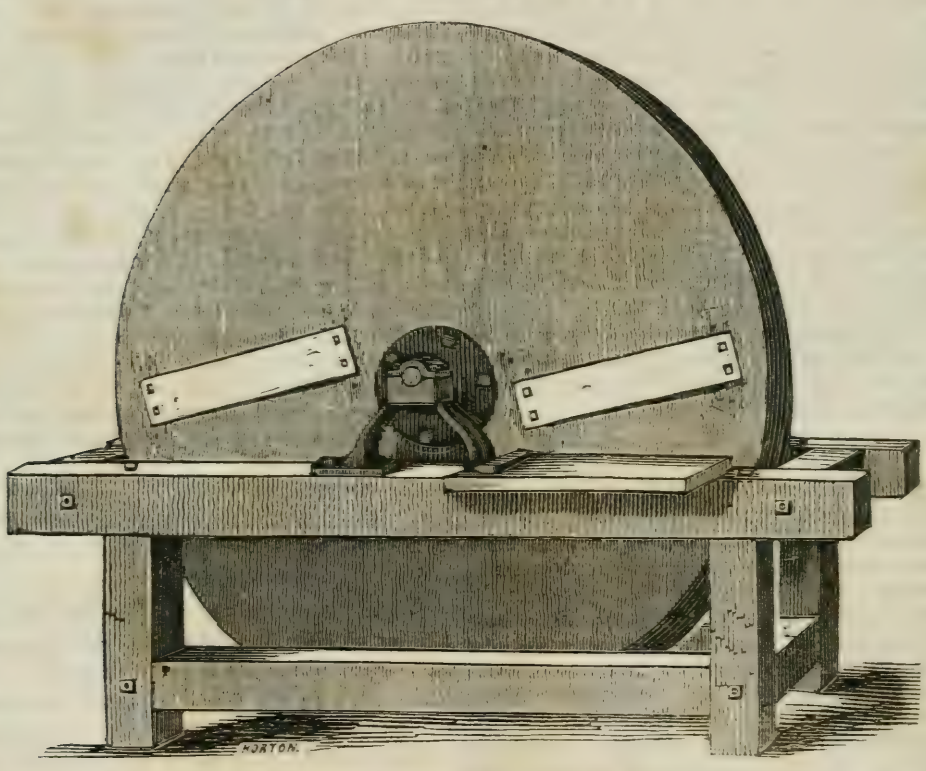
SALT.

At the request of the Editors, Mr. John C. Mather, of New York, furnishes the Cultivator with the result of his experiments with salt as a manure. In the spring of 1838, he sowed five bushels an acre on land well broken and harrowed, which was much infested with the cut-worm, leaving a strip of half an acre on each side of the field unsalted, to test the experiment. The worms were destroyed, and the corn and potatoes manifestly better on the salted than the fresh land. This superiority has been continued to be manifested in three successive crops since. In time of drought, the salted land has exhibited a continued moisture as manifested in the verdant green of the vegetable growth. Mr. Mather also states that he has sowed salt on his meadows with such satisfactory results as determine him to continue its use.

A great many experiments with salt have been reported from time to time. It is represented as having been sometimes injurious, some-

times beneficial, and frequently inoperative. Its action, which of course varies according to circumstances, has never been clearly and satisfactorily explained. The best opinion seems to be that it operates chiefly by producing or preventing the decay of animal and vegetable matter in the soil, consequently, the quantity applied should be proportioned to the quantity of these constituents; for it is a well known fact, that a small quantity of salt promotes decay, whilst a larger quantity is universally used to prevent it.

SHINGLE MACHINE.



This wonderful machine was exhibited in our city a few days since by the ingenious inventor, Mr. J. S. Raymond, of New York. We saw it in operation, and were surprised not less at the quality of the shingles, than at the despatch with which they were discharged from the machine, and the whole accomplished by an apparatus the most simple to be conceived. A wooden wheel, twelve feet in diameter, armed with two knives, is suspended on two journals, and set in rapid motion by a band running on a head on one end of the shaft. At each revolution of the wheel two perfect shingles are discharged from the machine. To facilitate the cutting of the knives, the blocks are all steamed. The round log is first sawed off into lengths, as may be desirable for the shingles: these round blocks are then rived into flat blocks, the thickness of the width of the shingle: these blocks are then steamed, and whilst hot, laid upon the platform of the frame, and pressed up to the plane of the wooden wheel: each knife in its revolution cuts off a shingle. The knives project further at one end than the other, and consequently, the shingles are thicker at one end than the other; in fact, when they come from the machine they are ready to be laid. Moreover, the knives are so arranged, that the point of one shingle is cut from the end of the block, from which was cut the butt of the one before,

whereby, the block is kept square and true, without any loss of timber.

This machine is so simple and light, that it may be moved any where, and driven by two horses; and yet so efficient is it, that it is said to be capable of discharging ten thousand shingles an hour. Mr. Raymond carries with him the most numerous certificates of the simplicity, durability, and efficiency of them achine. We should think it would prove invaluable in some of our cypress swamps, and hardly less so where shingle timber is scarce, for it converts timber into most excellent shingles, that would be wholly unmanageable by hand. The steaming process is the most troublesome, though not expensive, for the inventor offers to carry the machine any where that a large job will be furnished, and from the logs delivered him, to return shingles at the rate of fifty cents a thousand. The cost of the machine, alone, is from one hundred to one hundred and fifty dollars, according to size, the largest cutting twenty-eight inches in length, and being intended for cutting barrel staves as well as shingles. Individual or county rights may be had on moderate terms.

☞Any further information that may be desired can be had by application, post paid, to the Editors of the Planter.

For the Southern Planter.

Red Hills, Albemarle, May 26, 1842.

Sirs,—The enclosed sheet contains the Constitution of "*The Albemarle Hole and Corner Club, No.* 1," which, by order of the Club, I enclose to you for publication in the "Southern Planter." Its provisions will fully disclose the objects of the Association; and we are persuaded that, if pursued in the proper spirit and with a zeal which the great importance of the subject will justify, the cause of agriculture will derive greater benefits than from any other method of advancing its great interests. It is this persuasion that makes us desire the publication of our organic rules; and it is in the hope that similar clubs will multiply that we have designated ours as No. 1. Our name is taken from that of similar clubs organized in Scotland about the year 1784, and from which arose that celebrated association, the "Highland Agricultural Society," which has changed the face of that country, and which in spite of the unpropitious influences of its stern climate converted its barren heaths, and reluctant soil in one of the best cultivated and most productive portions of Europe. Such is the origin of our name. It will excuse its quaintness.

The few meetings which our club has already held have been distinguished by a fine earnest spirit, and a vigorous zeal. Various experiments on subjects of high interest, have already been indicated, and when our conclusions shall have sufficiently ripened for such a purpose, we may hope to communicate observations which will add an interest even to the pages of the Southern Planter. FRANK CARR, *Cor. Sec'y*

To "The Albemarle Hole and Corner Club, No. 1."

CONSTITUTION OF "THE ALBEMARLE HOLE AND CORNER CLUB, NO. 1."

Among the causes which seem now to retard, in this section of country, the improvement of agriculture, both as a science and as a source of profit, and which tend to render farming an irksome, instead of a pleasant occupation, we note the following as the chief: 1. Careless and inaccurate experiments, of which the results are either altogether unsatisfactory or lead to erroneous opinions. 2. A slovenly and incomplete execution of farming operations, whereby fields, half ploughed and crops half tilled, fail to realize our hopes. 3. Insufficient and immethodical attention to beasts of the plough, and stock of all kinds. 4. A want of careful attention and accurate observation, whereby wrong and hasty opinions are often formed. 5. The absence of combined exertion to improve our profession. 6. The want of sufficiently free and social interchange of individual views and experience among farmers.

Wishing to remove these and all other obstacles to the improvement of our profession as far as we can, we have determined to associate ourselves into a neighborhood club for the purpose of testing the theoretic branches of husbandry, by more thorough and accurate experiments and observations; with a view of exciting a desire for, and determination to have better preparation, tillage and general culture, by frequent neighborly visits and inspections of the condition of each others farms, and with the hope, by a free and unrestrained exchange of our different views and opinions of eliciting the truth, deriving mutual knowledge and improvement and promoting social feelings and happiness. And as it seems meet and necessary, when men unite for the attainment of a common object, that they adopt organic rules for the direction and government of their combined efforts, we do agree to adopt the following as the basis of our organization:

1. We will call our association, "*The Albemarle Hole and Corner Club, No.* 1."

2. The officers of the Club shall consist of a President, Vice-President, Recording Secretary, Corresponding Secretary and Treasurer.

3. It shall be the duty of the President, and in his absence, of the Vice-President, to preside

at all the meetings of the Club, to preserve order, to appoint all committees, and to call meetings of the Club whenever he may deem its interests require it.

4. The duty of the Recording Secretary shall be to keep a full and regular record in a bound book, of the proceedings of the Club, subject to the inspection of any member, and he shall, at every meeting read the minutes of the preceding meeting, with a view to the correction of the same and for the information of the members.

5. It shall be the duty of the Corresponding Secretary to conduct all the correspondence of the Club; to prepare for publication all parts of proceedings, reports of committees, &c. which the Club may order to be published—and he shall lay his correspondence before the Club when required to do so.

6. It shall be the duty of the Treasurer to receive and keep all the funds of the Club—to pay all expenses which shall be ordered by it, and to keep a separate account, and make report and exhibit of the same at the end of his office.

7. The officers of the Club shall be elected at the present meeting, and continue in office one year from the date of their election, or until others are elected in their places. All elections shall be *viva voce*.

8. The limits of this Club shall not embrace more than twelve farms, and the owners and representatives of these farms shall be the members of the Club; and no farm situated more than twelve miles from the forks of the Rivanna River shall be embraced in the limits of the Club

9. The Club may elect honorary members of the most distinguished agriculturists or scientific men of the vicinity, whose privilege it shall be to attend any of the meetings of the Club, and assist in their deliberations, and interchange views and opinions on all subjects connected with the great interests of agriculture.

10. Membership shall be constituted by subscription to the rules of the Club; and may be dissolved by voluntary withdrawal, or by failing to attend three successive meetings, unless excused by sickness or absence from the neighborhood.

11. New members and honorary members shall be elected only by unanimous vote; but all other questions shall be decided by a majority; except so far as may effect the rules by which the Club is organized, to alter or amend which a vote of two-thirds of the members present shall be required.

12. The Club shall meet on Saturday at one of the Club farms in regular succession once in every three weeks, beginning on the second Saturday in March and ending on some Saturday in November, except that one meeting shall be held in January; and each meeting shall designate the farm on which the next shall be held.

13. The Club shall meet on the day and farm appointed, at 10, A. M. and proceed to examine into and inspect all the operations in execution at the time, the condition of the farm, stock, horses, &c. the general mode of culture, rotation of crops, the subject of manures, and all other branches of husbandry—making such inquiries as may occur to them, and suggesting such improvements as they may think proper.

14. The Club shall dine with the owner of the farm at which the meeting is held; and after dinner shall discuss, in an orderly and temperate manner by conversation and not by speeches, such agricultural subjects as may have been selected for discussion, or as shall occur to them, if none have been selected. No subject shall be introduced into the conversations of the Club unless it be of kin to agriculture; and politics shall especially be excluded.

15. If the day appointed for the meeting of the Club be such as to prevent it, the meeting shall be held on the farm appointed on the Saturday next succeeding.

16. At each meeting a subject shall be selected for discussion at the next meeting, and when the discussion shall be finished, any two members may call for a decision of it by the vote of the Club; in which case, each member shall concisely give his opinion and the reasons therefor in the order called on by the President, an abstract of which shall be recorded by the Secretary.

17. Any subject selected for experiment by the Club shall be tested by a committee of three members, who shall make it in a fair and impartial manner, and shall report separately all the facts and circumstances which may attend it. Any member may suggest a subject for experiment; and as often as the Club may deem it expedient, a committee of three shall be appointed to suggest experiments.

This being the most important object of the Club, it shall be imperative on the members appointed, to make an experiment, to do so with care and attention, and to embrace in their reports all the circumstances and important features of the experiment, and all such facts developed in its progress as may conduce to accurate conclusions.

We were so much struck with the utility of the plan recommended, that we handed the communication to our old friend, the Rev. Jesse H. Turner, who happened to be sitting with us when it was received. He has been pleased to accompany it with the following remarks:

"A short time since, happening at the office of the Southern Planter, the Editor showed me a manuscript, which he had just received from Albemarle, giving an account of a farmers' club which had just been formed in that county.

To clubs of this kind, I give my most hearty and unqualified approbation. I have no hesitation in saying, that when properly conducted (and it is not an easy thing to conduct them otherwise) they are uniformly the means of doing great good. Nor do I say this from mere theory alone.

"Some time ago, a few of my neighbors with myself, were in the habit of meeting together at each other's houses for the purposes of social intercourse and mutual improvement. We always dined together at the house where the meeting happened to be. On these occasions, we had no President nor other officer; nor were we tied down to any set rules of formality. No subject had been previously agreed upon for discussion; but as farmers we naturally dwelt upon those topics in which we felt the deepest interest and which were most congenial to our taste. One and then another told the projects in which he was engaged—his plan of accomplishing them, and the benefit he expected to result therefrom. In this way each one detailed his mode of manuring, of cropping, of gathering in and disposing of the fruits of the earth. It was at one of these meetings that the plan of our Agricultural Society was formed; and it was at a subsequent one, that it was carried into effect.

"Now I would respectfully propose, that our good old habit be revived in my neighborhood, and that similar meetings take place in every neighborhood throughout the limits of our Society. One day spent in this way, will diffuse an amount of information, and enkindle an amount of zeal, of which we can form no conception at present. J. H. Turner.

HENRICO AGRICULTURAL FAIR.

The fair and show of the Henrico Agricultural Society was held on the 25th of May, whilst we were in press, and consequently too late for a notice in our last. We were pleased to see that there was no flagging in the zeal heretofore manifested by the good people of the city in the success of their agricultural friends. Indeed, the advantages derived to themselves personally from the improved agriculture of the surrounding country, and the consequently increased supplies of the city, are too manifest to permit them to be indifferent to the fate of this Society.

About two thousand of our most respectable citizens are estimated to have been on the ground, all exhibiting the highest gratification at what they saw and heard. A most sensible and eloquent address was delivered by Mr. James M. Garnett, which was listened to with the most profound attention by the assembled multitude. Nothing in the exhibition attracted more attention than the extraordinary display of hogs. Time was, when men turned away in disgust from the sight of this rude friend of the human race, (unless, indeed, he made his appearance in the more refined form of a good ham) but such is the improvement in the form and bearing of the modern Berkshire, that we observed many of the gentler sex, who did not disdain to visit some of the noble specimens exhibited at our fair. There was especially a beautiful sow exhibited by Dr. Garnett, a cross of the Berkshire and Byfield, that attracted universal attention, and Parson Turner's sow, Virginia, with her interesting little family, was surrounded by a crowd during the day.

At three o'clock, a large company sat down to a plain but excellent farmer's dinner, where decent mirth and sober hilarity reigned for the balance of the evening. After the withdrawal of the President at an early hour, Mr. Ritchie was called to the head of the table, where, by the exercise of the most gentlemanly urbanity, accompanied with an incessant flow of the most polished wit, he proved that his well known editorial abilities are the least of his accomplishments, and, as was well said on a former occasion, if any doubt his being the Napoleon of the press, none can deny him the title of the Chesterfield of the dinner table.

For the Southern Planter.

Jaynesville, Miss., May 27, 1842.

Mr. C. T. Botts:

Sir,—I am at present a subscriber to no agricultural paper but the Southern Planter, published in Richmond, Virginia, and I consider it worth ten times the price paid for it, and I would urge upon *every* farmer, whether wealthy or not, the advantage of subscribing to it, and particularly every farmer in Mississippi. But to the subject on which I commenced writing.

In one or two numbers of the Planter you published some experiments on early cutting of wheat. Having some wheat myself, I determined to try the experiment, which I did, cutting it in that state described by Mr. Hannam, in the raw state. But before I give the result of cutting my wheat early, permit me to give the whole process, 1st, of preparing the ground; 2d, preparing the seed, and lastly, that of cutting.

1st. I ploughed my ground intended for planting about the first of September, 1841, with two horses, turning it completely over, then let it stand until the 13th day of October; at this time, I laid it off in lands six and seven feet

wide, the lands being thirty poles, or one hundred and sixty-five yards long, on which I threw a bushel and a half of cotton seed to the land, broadcast, (I am particular in giving the quantity of cotton seed put on the ground, as too much would make it unfit for wheat.)

2d. Preparation of the seed. I dissolved salt in water until it was of sufficient strength to bear an egg; I soaked the wheat in this solution of salt and water, and all the light grains that would float, were taken off; then, while wet, the wheat was sowed at the rate of one bushel to the acre, the wheat and cotton seed ploughed in together with a small shovel, ploughing it very close.

Lastly. Early cutting. I commenced cutting when it was, as near as I could judge, in that state described by Mr. Hannam—that is, the straw, though appearing at a distance green, when examined closely was of a hue fast approximating to yellow, while for a foot upwards from the ground it was quite yellow. I cut my wheat while in its raw state, then tied it in small bundles with single bands—set it up in stooks of eight bundles on the ground, with the butts as far apart as possible, with two bundles put on top for protection. In this way I let it remain a week or ten days. The berry is fine and heavy, weighing from sixty to sixty-six pounds to the bushel.

I am thus particular in giving the result of the above experiment, as I am in hopes that the farmers of South Mississippi may be enabled, by some means, to raise a sufficient quantity of wheat for their own consumption; as yet they have found it to be a very uncertain crop.

I am, sir,

Your obedient servant, &c.

J. C. McLaurin.

For the Southern Planter.

FISH.

Mr. Editor,—I have been long an attentive reader of the Planter, and have often thought of endeavoring to contribute something amusing or useful to your numerous readers and correspondents, in return for the many useful and amusing pieces which I have received from them. Your paper abounds with essays upon the best mode of raising horses, cows, sheep and hogs, but no one, I believe, has yet thought of saying a word about raising fish. For the present, I will content myself with relating an experiment upon this subject, which may be amusing if not useful to your readers. In the winter of 1840 and 1841, I had occasion to make an ice pond just below a spring and very near my house, in hopes of using it during the winter; but it was so late before I finished it, that it proved of little avail for that purpose; I then thought of using it as a fish pond, and made it a little deeper and put ditches all around it, so that it should be fed by none but spring water, that it might be pure, and that it might keep the great floods of water above the spring from coming down in heavy rains to break my dam, which was of dirt. In the spring of the year following, I put a number of roaches and other small fish in the pond as breeders, the former to breed small fish for food for the larger ones, which I intended afterwards to put in—the latter to breed for use; among which were many sun perch and little swamp chubs or horn fish, as some call them. In breeding the roaches and sun perch, I had succeeded most wonderfully before the end of the summer. About the last of August I could bring thousands of those to any part of the pond by throwing in a few crumbs of bread or a little fat bacon. In September or October following I put in the pond seven Carolina chub and two pike, some of them twelve or fourteen inches long, others much smaller, and never saw any thing more of them till the first warm weather this spring. I then had the curiosity to examine the pond, when I saw the two pike and four or five of the chub, all apparently much increased in size. I saw at the same time many small fish about four or five inches long, which I took to be young chub, but they might have been sun perch, of which I have discovered a great many in the pond since. Some time after this, I invited a neighbor and his son (from whose pond I obtained the chub) to come over and see his old subjects. He did so, and we were fortunate enough to see one of the largest of the old chubs and many young ones, as he and his son both thought. In this, however, we might have been mistaken—they may have been sun perch; but I see no reason why the chub may not have multiplied as fast as the sun perch, which are now very numerous, and big enough for the pan. At almost any hour of the day, when a warm spell of weather immediately follows a cold one, the chub may be seen traversing the pond nearly upon the top of the water, causing the small fry to dart for it in every direction, recollecting no doubt the sad havoc which had been made upon them on former occasions; the sun perch, however, if of any size, seems not to regard this little monster of our deep; but holds his place, disregarding and disregarded, by his dangerous neighbor. These sun perch will take a position in the pond near the shore, and remain there for days, and sometimes for weeks, without changing it, or seeming to seek any food, or to eat any thing except it be a small fish-worm, and that only when it is thrown in contact with its mouth. The chub sometimes will take a similar position, and remain for hours at it; but is much more easily frightened away. The sun perch, if you scare him away, will come again in very quick time, but the chub will not return so soon, and will

not stay so long when he does come. I attend my pond every morning, when I am at home, with cups of bread about half as big as my hand. With this I feed the little fish and it seems amply sufficient to keep an abundant supply of them as food for the large ones. The chub may eat bread, and it is said they have been caught with it on a hook; but it is my opinion, they will only eat bread, when they are half starved for fish. At any rate, I have never seen them notice bread; though I have frequently seen them when it was laying at the bottom of the pond plain in their view.

I have frequently heard of whistling up fish from the deep, and leading them up and down the pond by certain calls; but I was always inclined to believe these tales fabulous. I however am now inclined to think from my late experience that the thing is practicable; though I do not pretend to say that I have trained mine to any such whistles or calls yet. If any one of your readers have turned his attention to this subject, a few lines from them, would, I think, be read with pleasure and profit. A fresh dish of fish is a great delicacy, when they are caught in great abundance every day; how much more highly would they be valued, when they can be only had in nearly a putrid condition.

I may be too sanguine, Mr. Editor, but it is clearly my opinion that it will cost no more to raise fish than it does to raise chickens; and that the time is not distant, when I shall be able to get a mess of fresh fish with as little, or perhaps less labor, than those who live on the tide water banks of the James and Potomac rivers.

CHAS. S. JONES.

At the paper mill in this city, they require a constant supply of pure water, which is obtained from a pond supplied by a spring branch. The intelligent manager of the establishment, Mr. Richards, some months since, called our attention to the myriads of fish that swarmed in this pond, and informed us that they were the product of a few that he had placed in it a year or two ago, by way of experiment. He had procured a general assortment of the fish common to our waters, and had found them all to increase and multiply exceedingly. He expressed the conviction that every country gentleman could, with a little expense and less trouble, keep his table constantly supplied with the finest fish, nothing is more common in England than these artificial fish ponds, and we have no doubt they would prove as profitable as convenient.

To any of our friends who desire to try the experiment we would recommend the Potomac white perch, which is different from, and superior to, any other pan fish we ever saw.

For the Southern Planter.

Mr. Botts,—I have, for some time past, intended to write a few lines for your paper, in relation to two implements I have used for several years, as I think, with great advantage, in the business of securing hay:—A revolving rake, drawn by a horse, for gathering the hay when ready for shocking, and a very simple contrivance which I will call a slide, for moving the shocks to the place of stacking; and as the season for hay-making is now at hand, possibly some of the readers of your paper may profit by one or both. In the use of these implements there is great saving of time and labor, but in the hay crop a saving of time is the most important, as the gain of even a single day, sometimes might enable the farmer to get his crop in stacks, and thus avoid the loss and injury from exposure to a long rain whilst in shocks.

I shall not undertake to describe the construction of the rake, as I should probably not succeed, and as I hope by the time this reaches you, a friend, to whom I loaned a model with particular directions, as to the dimensions of all the parts, will have sent them to your office as I requested him.*

I will merely say that the rake head is about ten feet long, with teeth about twenty inches long, nearly two inches square, projecting on each side of the head, or in other words, the teeth are made by pieces of the above size, something more than three feet long, morticed through the head, and flattened like a wedge at the end. It is so constructed, that when one side gets full, you can direct the points of the teeth, so as to strike the ground, cause the rake to turn over, and leave the hay that has been gathered: the teeth on the other side are then ready to operate. You drag across your meadow backwards and forwards, turning over the rake always in the same line of the first turning: and thus you have your hay drawn up in straight rows, by one horse, as soon, I think, as six or eight hands could do it with pitchforks, and if your meadow is tolerably level, as clean as hand rakes would do it.

I am indebted to my friend, Major Hunton, of Fauquier, for the model, and have fully realized the advantages he promised. This rake, I understand, is generally used in his county. I have found it very useful in gleaning a wheat-field.

The slide is a very simple contrivance, being a white-oak sapling, twelve or fourteen feet long, square at the but-end for receiving a clivy, and flattened to the other end, so that it will keep one position in dragging, and thin enough at the end to shove under a shock. Bore an auger

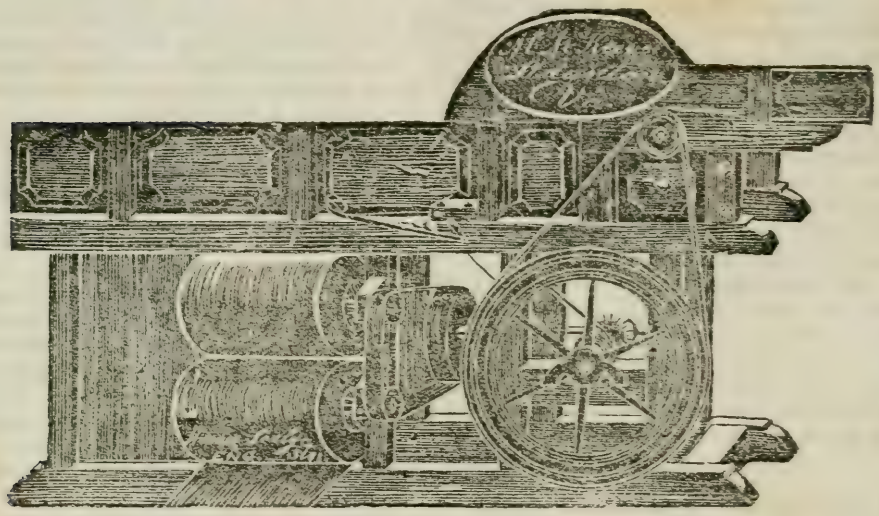
* We have not yet received the model, but will furnish an engraving of it as soon as it comes to hand. Will Mr. Fontaine be so good as to look to it.—ED.

hole through this pole eighteen inches from the clivy, through which you pass a chain with a key to the end. To move a shock of hay run the pole or slide under the middle of the shock; the chain must be drawn over the top of the shock—hooked around the small end of the slide, binding it together top and bottom, and if you do not leave some hay between the pole and the ground, the horse will carry it all away, any where you please. The advantage of this mode of moving hay is that you get it to the place of stacking, without being loosened or stirred up, and taking it up in compressed flakes, you stack faster and better. I move my straw from my wheat machine to the place of stacking, unless I stack at the spot, in the same way—laying down the slide and building shocks on it, or shocking and running under as with the hay.

E. FONTAINE.

Beaverdam, Hanover, June 10, 1842.

M'KEEVER'S THRESHING MACHINE.



Mr. M. M'Keever, from Staunton, Virginia, is now in our City with a machine for threshing and cleaning wheat and other grain, which comes highly recommended by some of the best farmers in the agricultural county of Augusta.

There is nothing very peculiar about this machine, except the combination of the Fan with the Thresher; a combination, which we have long thought extremely desirable.

The wheat in the straw is fed to the thresher in the usual way, and the wheat and straw are delivered together into a long trough, the bottom of which is an inclined riddle. This riddle is shaken to and fro by the machinery, which serves the double purpose of dropping the grain through the riddle, and passing the straw on down the trough; the grain falls into the riddle of a common fan, where it is again sifted and fanned, and then passed into another fan, where it goes through a similar process. It is finally delivered, as stated, clean and ready for market.

This arrangement undoubtedly saves much handling, as well as the raking necessary to separate the straw from the grain. The machine is by no means complicated, although the two operations being combined, it of course requires a few more bands and wheels than are used in the thresher alone. The additional power required to drive it, we are informed, is hardly perceptible.

The principle of the threshing part of the machine is exactly the same with that of Parker's and numerous others now in use, and the detail is, we think, equal to any of them.

The horse power furnished by Mr. M'Keever differs from a hundred others only in being, apparently, very substantially and neatly made, which, by the bye, may be said of the whole machine.

We expect to see it in operation in a day or two, after which we will be better qualified to speak of its merits.

PAGE'S SAW-MILL.

At the earnest request of several subscribers we went to examine one of Page's circular saws, that we might the better express our individual opinion of its merits. It has long been a great desideratum to apply the circular saw to cutting large logs. The difference between the friction of the circular and the up and down saw was so apparent as to induce many attempts to substitute the one for the other. Although several of them obtained a short lived reputation, difficulties presented themselves which caused them all to be eventually abandoned, and the general conclusion was, that the object could not be effected. One great difficulty was the supposition, that obtained at that day, that velocity was necessary to the action of a circular saw; this opinion was probably derived from the well-known fact that a circular serrated plate of softer metal, revolving rapidly, will cut a harder one in a state of rest; but this circumstance is now referred to a principle entirely distinct from any connected with the application of a circular saw to timber. This supposed necessary velocity caused the saw to heat and expand in the centre, or *buckle*, as it is technically termed. It was left for the genius of Mr. Page to overcome this difficulty. He effects his object by two means. He runs his saw 300, instead of 1,200, revolutions a minute, and he also relieves it by giving the shaft, upon which it is placed, a horizontal play of an eighth of an inch in the journals. In this simple manner, he avoids all heat and effects the great object of rendering the circular saw subservient to the lumber business. The carriage and apparatus for setting out are very ingenious, and do great credit to Mr. Page's mechanical skill; but we presume the claim to a patent is founded upon the horizontal play of the shaft, upon which alone we imagine it can be sustained.

The saw we examined was driven by steam power, and was capable, we were informed, of cutting ten thousand feet of inch plank a day. We saw no reason to doubt the statement. The quality of the work was equal, if not superior, to any we ever saw.

Over and above the power derived from inferior friction, this saw affords the greatest advantage in the facility with which it may be moved from place to place. As it was much easier to carry Mahomet to the mountain, than to bring the mountain to Mahomet, so is it much easier to carry this saw to the timber than to bring the timber to the saw. Of all the expenses and trouble in the heavy business of lumber getting, none is so great as the labor of hauling heavy logs to the mill. Nothing, therefore, is more to be desired by the lumberer than a mill that can readily be transported from one lot of logs to another. Mr. Page's can be moved with a team and six hands a mile or two in five or six hours. The heavy timbers and firm bedding required, render such a movement with the old mill impossible. Indeed, it would be hard to foresee or enumerate all the advantages that may flow from this successful attempt to introduce the circular saw in the lumber business.

We have been frequently asked by our agricultural subscribers, if we would advise them to purchase one of these saws, to be driven by horse power, for their own and neighborhood use.

In the first place, we do not hesitate to say, that it requires a good deal of mechanical skill to keep a circular saw in order, and that no man ought to have one of these saws, who would not have work for it sufficient to justify the employment of a mechanic at good wages. It is true, indeed, that any saw will cut much better when well attended, but we think the farmer will get along better with the old negro sawyer and the up and down saw, cutting five or six hundred feet a day, than with the circular saw in the hands of the same individual.

With respect to horse power, we believe that six horses will be required to cut two thousand feet a day with Page's mill, and we know that, for such an extent, horses are the dearest and most indifferent kind of power, in the general. To be sure, it possesses the great advantage we spoke of a little while ago in a superior degree, the facility of being moved; and it may be, that a farmer has horses frequently idle, that might be profitably applied to sawing; but, upon the whole, we imagine, that this mill is chiefly adapted to, and will prove most profitable, when in the hands of a good mechanic, driven by a small moveable steam engine, it is applied to lumber getting as a business.

For the Southern Planter.

IMPORTED HOGS.

Messrs. Editors,—I wish to record in the Planter the importation of three fine hogs from England. Two of them are a pair of the Sus-

sex breed, selected upon the recommendation of farmers in that country. They are black hogs of good breadth and length—the limbs and head small. They appear too to be very active and capable of *rooting* a little for their living.

The third is a Berkshire—the survivor of a pair purchased at Reading, in the county of Berkshire. The boar of this pair unfortunately died on the passage from England. Since their arrival at my farm, on the Chickahominy, their health has not been very good, which prevented my exhibiting them at the Henrico Agricultural meeting on the 25th instant. Their condition, I am pleased to say, is now improving.

The Sussex sow was imported in pig by a fine boar of the same breed in England, and she has since her arrival at my farm produced a litter of seven pigs—five of which appear to be good ones, and two are inferior, which I will kill. Of the five good ones, I am willing to sell the boar pigs at six dollars each—the sow pigs I prefer to retain, but will dispose of them at the same price to any one particularly anxious to have them; they are now about sixteen weeks old.

Very respectfully,

R. B. Haxall.

May 28, 1842.

NEW YORK STATE AGRICULTURAL SOCIETY.

We are much indebted to the politeness of Mr. Luther Tucker for a copy of the "Transactions of the New York State Agricultural Society for 1841." The principal portion of the volume consists of essays upon agricultural subjects from eminent agriculturists, both at home and abroad, constituting a fund of information invaluable to the farmer. We shall prove the sincerity of our opinion of the merits of the work by the copious use we shall make of its pages.

For the Southern Planter.

Pharsalia, Nelson County, June 2, 1842.

Messrs. Editors,—In the month of May, 1840, the rye crops in this and the adjoining counties, exhibited (for the first time within my recollection) a yellow rust on the blades, that soon invaded the stalk and arrested the filling; some ten days thereafter, the wheat crop followed suit, and proved well nigh a total failure. In June, 1841, the same disease appeared in my wheat crop, and lessened it seventy-five per cent. in quantity and quality. The rye also participated in some degree, but not so extensively, as the year preceding. My oats suffered likewise from the same malady, and my timothy was by no means exempt. Some two or three weeks ago, I discovered the same scourge on the brier leaves, and within a few days past on my rye blades, from which I have strong fears it will extend to the wheat. Should it be so, all the bright anticipations of relief from that source, will be blasted, at least should that disease generally exist. It is, in my opinion, entirely different from the old fashioned red or black rust, and although its ultimate effects are the same, it is more generally destructive, in so much as it has no respect for localities—invading all kinds of soil, culture and grain, nearly alike. I enclose you several brier leaves, to show the character of the disease. It may, however, be no new thing to yourself or readers.

While on the subject of briers, I have to say that I would be greatly obliged if any of your numerous readers can devise a plan for their destruction. The best and deepest culture with me seems only to invigorate their growth. I am compelled regularly to mow my fields before fallowing them. The August mowing, followed by an immediate deep ploughing, seems to cripple them most, but nothing that I have done has proved effectual. Rest and the use of plaster have made a perfect wilderness of my fields, and constant culture would make them barren.

My soil, (situated immediately at the foot of the Blue Ridge) while very productive, is a spongy, puffy loam, on a stiff adhesive red clay, and more inclined to put forth brier bushes, &c. than any other I have seen, except that of similar character, in the same range of country.

In haste, very truly yours,

William Massie.

We have exhibited the brier leaves, sent by Mr. Massie, to several of our visiters, who had never noticed the appearance which they present; but Dr. Morriss, of Louisa, informed us that nothing was more common than to see the leaves of the brier about his plantation covered with this species of rust, which he had no doubt was a vegetable fungus, arising from the same causes that produced the rust in wheat, though he had never observed any connexion between the two, except that the same weather produced both.

For the Southern Planter.

AN EXPERIMENT ON STONE FRUIT.

You know, sir, how difficult it is to ripen the nectarine. Being a smooth-skinned fruit, free from the furze, the curculio is fonder of attacking it than the peach, and it is generally eaten up by its worm. As the immature fruit falls, the worm retires into the earth, only to rise again the next spring and renew its ravages upon the young nectarines. I had been so often tanta-

lized in the growth of this beautiful fruit—none of my three trees bringing in many years a single specimen to maturity on my little farm, that I determined to remove one of them to my back yard in the city, which is well paved with brick. The result corresponded to my hopes. In the second spring the tree produced as beautiful nectarines as could be desired. My apricots always succeed in the same situation—and a worm is never seen in them (for ten years)—among them is the *black apricot*, a sound, very pretty and racy fruit, partaking of the character of the plum and the nectarine.

My attention has been drawn to this matter by an article in the last "Farmers' Register," 207, on "The Fruit Curculio," from Hillsboro', North Carolina, April 8th, which states that, "a few years since, while at the house of a very intelligent farmer of Lincoln county, I was forcibly struck with the lively and *clean* appearance of his plum trees, which were then loaded with fruit. On inquiring his mode of treatment, he remarked, that the only secret in the case was to set them out by the *road-side*, (as his were) or along some path where the ground *would be trodden down as hard as possible.* It would appear, therefore, that the rationale of the thing is not to be sought in the shell marl or in the clay, but in having such a hard pan of earth around and under the trees, that the insects, which infest them, cannot get a lodging place in the soil."

Yours, with the best wishes for the success of your Planter, T. Ritchie.

Richmond, June 1, 1842.

P. S.—If your friends desire any cuttings of the black apricot, they are welcome to them. I will send you a specimen of the fruit when it is ripe. The tree grows in my back yard. My nectarine tree was an old tree, much injured by the worm before I removed it—and was stripped down by the wind the fourth year after it was transplanted. T. R.

There is no man in this country, who understands, better than Mr. Ritchie, the proper mode of demonstrating to an *editor* the truth of a proposition: we have received a plate of the fruit, rare as it is delicious, the black apricot, to which he refers. In the name of our friends, we return thanks to Mr. Ritchie for his polite offer with respect to the cuttings.

That the fruit is saved from the curculio, if the passage of the worm from the fallen fruit to the ground can be intercepted, is confirmed by the testimony of Mr. John Carter, the celebrated nurseryman in this vicinity. Instead of the trampling or pavement, Mr. Carter subjects them to the devouring jaws of his swine, which have a regular run in his peach orchard.

For the Southern Planter.

HOGS.

Manchester, Va., April 28, 1842.

Mr. Botts,—I did not receive your April number until last night, and I have as yet read but two or three of the pieces in it. The first thing I always read in every paper of the kind, coming into my hands, is the article on hogs, if it contains any such. I of course greedily devoured Gen. Richardson's communication, and in reply, I have to say, that I and my father have been breeding Berkshire pigs for sale for two years; my stock is now large, and some of them very superior of their kind. It has been my decided conviction, ever since I commenced with the Berkshire, that it was the most beautiful hog in the world; they are certainly the best and most prolific breeders; some of mine having produced me twelve pigs at one year old, (too many) and such is the capacity of the sow for giving milk, that she can raise any number of pigs well if she has a *teat* for each; but unless there is one for each, the superfluous number should be taken away, and either destroyed immediately, or put with another sow. I believe that full blood Berkshires can be made to equal any hog at nine and ten months old; but, sir, I am, if I know myself, an honest inquirer after truth; and if we have a better hog among us, the owner need only to convince me of the fact, and I will be his customer; this can only be ascertained by actual experiment. I am anxious that it should be done. I will, therefore, do what my immediate interest would *not* prompt me to do, did I consult it alone,—I will, instead of selling three or four of my best pigs, now two weeks old, agree to feed them until they are ten months old, and then exhibit them at your office, against pigs of the same age of any other breed—the pigs to be named and marked by some judge at the Fair, 25th of May next. If on that day I am beaten by a hog that is handsomer, larger, more thrifty, a smaller consumer, and its family a good breeding family, and it giving evidence that they will breed all the pigs of a litter alike, and of good quality, as do my Berkshires, then will I confess, that it is a superior hog, and pledge myself to breed them exclusively, if the quality of meat equals the Berkshire.

I have written this in great haste on the spur of the moment, as gentlemen are waiting for me to mount and ride to the election; and as I am afraid that if I wait until to-morrow I shall be too late for your May number.

Your friend, L. M. Burfoot.

The above was mislaid and is now inserted at the request of the writer, who is still desirous to test the merits of different breeds by actual experiment.

VELVET GRASS.

From Captain Meriwether, of Albemarle, we have received a specimen of grass which we understand he values very highly. The species is not uncommon in this neighborhood, and has been known for several years. It was at one time a great favorite, and is still esteemed by many. Nothing can be finer than the appearance it presents; its rich soft surface having procured for it, we presume, the name by which it is known in this region, velvet grass; but it is generally esteemed light and chaffy, and is rarely found now in our meadows, except as a volunteer. We have received a specimen of the same grass from Elizabeth City.

For the Southern Planter.

THE RUST.

Big Lick, Roanoke, June 22, 1842.

Messrs. Editors,—The rust has appeared upon our wheat in this quarter. Up to the period of its appearance, within the last ten days, we were elated with the prospect of an abundant harvest, but the rapid diffusion of this disease over high lands and low grounds, upon rich lands and poor lands, upon thick wheat and thin, and upon that growing upon cloverleys as well as that upon corn lands, has destroyed all hopes of a *full* harvest, and excited serious apprehensions of a disastrous failure.

Is this a disease which care and good management may guard against, or is it the result of causes beyond human control? If rust is, as many learned and scientific men have contended, a species of parasitic fungus, which lives through all seasons on the barbary shrub, willow, coltsfoot, corn marigold, brambles, &c. &c. and which, in warm, humid weather, is excited into active life and flourishes with such astonishing luxuriance that it affects thousands of acres in a few days, it may be guarded against by the careful extirpation of the trees and weeds, which nourish and shelter it.

If it is, as others suppose, a disease peculiarly incident to light lands, and produced by the roots penetrating to a poor subsoil, affording meagre nourishment to the plants, and thus receiving a check, which when followed suddenly by warm, humid weather creates the disease, the evil may be mitigated, if not entirely corrected, by treading or otherwise giving compactness to the soil, when the crop is sown. Experiments upon an extensive scale in Scotland and England have favored this theory, and many of the farmers of those countries have adopted a system of trampling with cattle, under a conviction that it is an effectual preventive of this mildew.

If, as others suggest, the disease proceeds from minute fungi attached to the grain sown, and which being absorbed by its roots whilst germinating, is propelled like the *uredo fœtida* by the circulating sap, throughout the plant, and affects the maturation of the grain, according as circumstances are favorable or otherwise to the growth and extension of the fungi, we may avoid the disease probably by steeping the seed in lime-water, as is recommended for smut (*uredo sigetum.*)

But if, on the contrary, it results from plethora, induced by excessive vegetation, then I am fearful it is an evil beyond remedy.

That the last is the true character of the disease I am convinced, though I express the opinion, with some diffidence, as I know it is opposed to the views of many agricultural writers of distinguished reputation.

Rust never appears until the wheat has attained its full growth, and when there is nothing left for the leaves and stem to perform, but the elaboration of the juices for perfecting the seed. When plants have reached this point every physiologist knows that they require no further extraneous aid in the formation of their seed. The ovary has performed its office, fructification has taken place, and the gradual concentration of the juices of the leaves, stem and roots in the seed, producing the death of the former, is all that is required. Before attaining this state, excessive vegetation only produces excessive growth; but when the plant is fully developed and nothing more required for the maturation of the seed but a slow, gradual and regular supply of duly elaborated sap, if there should then happen a warm, damp spell of weather, a succession of sun and showers, an inordinate flow of sap is at once produced, which destroys the consistency which is then so necessary to the grain, and you distend the vessels to such a degree, that they burst of their repletion and exude upon the surface. Should this occur when the grain is in the milk state it is destructive of the grain, which perishes for the want of proper nourishment. When the wheat is thus struck early, and the grain destroyed, it is usually attributed to the *black* in contra distinction to *red rust*, by inaccurate observers, who are not aware, that all rust is the same, resulting from the same causes, and that what is called black rust was at first *white*, then *red*, *brown*, and finally *black*, from the action of causes familiar to every chymist. When the grain has reached the dough state, before the disease appears, the crop is oftentimes very slightly affected, and the *rust*, when the wheat is cut, from not having been so long exposed to solar and atmospheric influences, is *red*. Hence the popular remark, that "red rust doesn't injure wheat like black rust."

I have heretofore supposed that the exudation proceeded from the bursting of the minute surface vessels, whose rupture not being visible to

the naked eye, had discredited the theory, which taught the existence of what couldn't be seen. But in conversation a few days since with a sensible and observing farmer of a neighboring county, he told me that the ruptures were distinctly visible, when the rust was removed with care. On the same day he illustrated the correctness of his statement by produced several stalks of rusted wheat, upon which longitudinal ruptures were very distinct under every blotch of rust examined. This fact corroborates the theory here maintained, so conclusively, as scarce to leave a loop to hang a doubt on. It is possible, however, that there may be some mode of resolving what seems to me to settle this long mooted controversy. In confirmation I will add that wheat rarely, if ever, rusts when growing under a tree. The draught upon the soil, which is made by the tree, prevents that excess of nutriment, which would otherwise be given to the plants. Can this be satisfactorily accounted for upon any other hypothesis?

If, then, I am right, is it not an evil without remedy—dependent upon the seasons, and of course, beyond human control? Some have suggested as a mode of avoiding the damp sultry weather of June and July, which all admit have an important agency in developing the disease, to sow early, or substitute the May wheat, which matures much sooner than the kinds in general use. But I think it is better "we should patiently bear the ills we have than fly to others we know not of." If we sow early we are almost certain of suffering by the ravages of the Hessian fly, and if we substitute the May wheat, we at once sacrifice a prolific wheat for one which yields indifferently, and besides we incur the hazard of having our crop killed by frost.

Such, Mr. Editor, are the views which I entertain upon this subject, more condensed, perhaps than is consistent with perspicuity, but "deformed, half formed and unfinished," as it may be, I confide it to your discretion to be ushered into the world or not as to you may seem fit. It is the first time the current of my inkpot has been directed to your little reservoir and I should prefer your diverting it, unless you find it clear and healthful.

With the best wishes for your success,

W. M. Peyton.

We hope that the fountain of our correspondent's inkpot will prove a constant and steady feeder to the reservoir of the Planter. We know of no stream whose course we should be more proud to divert into our channel.

For the Southern Planter.

Mr. Editor,—The question has very frequently been asked, since the arrival of the June number of the Southern Planter, why it came out without an index as formerly. Please solve the difficulty.

And also, respecting Mr. H. Milton Hart's remedy for stopping the effusion of blood, on page 136, June number. We beg to be informed by what means cobweb can be bound to the roof of a horse's mouth?

Being friendly to the Planter and having exerted myself much to promote its interest,

I am your obedient servant,

A Subscriber.

Gloucester County, June 5, 1842.

The press of original agricultural matter coming in late in the month, excluded the miscellany, the markets, and table of contents.

We published the cobweb recipe as an extract, without knowing any thing of its virtues. We see no difficulty in its application to the mouth of a horse. The simple application may cause the blood to coagulate and it may adhere without a bandage, although if one is necessary, there would be no difficulty in applying it by passing it through the mouth and securing it on the top of the nose; for in bleeding a horse in the mouth, care must always be taken to make the incision in one of the bars below the corner of the mouth. Of course, a wad would be placed between the cobweb and the bandage at least as thick as the length of the teeth. We have, by the exercise of a little ingenuity, applied many more difficult bandages than this.

For the Southern Planter.

SASSAFRAS.

Mr. Editor,—In looking over some of the volumes of the Farmers' Register, I saw in the seventh number, first volume, a communication from Skrinicsky, of Buckingham, stating that his plan for destroying sassafras bushes (that abominable pest to many farmers) was simply to cut down or grub up the sassafras in the winter, and turn in a flock of sheep on the land in the spring and keep them there during the spring and summer of that and the ensuing year.

One of my fields is rendered almost useless for small grain in many parts, owing to the sassafras. The same field is thickly set in clover; that being an early growth in the spring, will not the sheep neglect to browse the sassafras, and destroy the clover, and thus the much desired effect be defeated? Will Skrinicsky, or any other gentleman, be so good as to give the desired information through the Southern Planter?

An Inquirer.

Powhatan Co. June 25, 1842.

RECIPES.

We are anxious to make the Planter a record of valuable household recipes, conceiving that there would be no department of the paper more useful than this, if well conducted, and believing that no part of America affords a better source for such a collection, than might be obtained from the housewives of Virginia. We frequently extract from other papers recipes of which we know nothing; but for any that appears in editorial form, we are ready to vouch. Since the publication of the recipe for PICKLE VINEGAR, p. 124, we have had an opportunity of testing its value by an experiment made upon the pickle itself, and if our readers can place any confidence in our taste, we advise them not to omit a trial of this mode of making pickles. From the same source we also obtained the following unrivalled recipe for making

PLUM PUDDING.

Beat eight eggs very light, add one pint of milk, one quart of flour, and three quarters of a pound of butter after it has creamed; cut and stone your raisins, rub them in flour and mix them in the batter with half a nutmeg, wet your cloth, flour it, tie it up tight, and shake it frequently to prevent the plums from settling at the bottom; put your pudding in when the water is boiling; have a plenty of water; two hours will boil it well. The sauce used is made of sugar, wine and nutmeg.

BARLEY.

Loudoun Co., Va., June 27, 1842.

To the Editor of the Southern Planter:

Dear Sir,—Propositions have been made to some of the Loudoun farmers to undertake the growing of *barley* upon our well improved lands, and we would cheerfully do so if we knew any thing about its management, but not being acquainted with the proper treatment of the crop, we are compelled to ask information upon the subject, and most earnestly request that some correspondent of your valuable paper (unless an *editorial* will do as well) will furnish through your columns a statement showing the kind of soil best suited to its growth—the preparation necessary—the time of sowing—the quantity to be sown to the acre—the time and mode of securing the crop—the manner in which it can best be separated from the straw—to what useful purpose the *straw* can be applied after the separation, and the comparative value of the *wheat* and *barley* crop to the grower—in short, a concise treatise upon the cultivation and advantages of a *barley crop* is urgently desired by many Loudoun farmers, and particularly by a

LOUDOUN SUBSCRIBER.

P. S.—I am sorry to inform you that the *rust* is playing the mischief with our wheat.

We will try and furnish the information desired in the August number, and will be much obliged to any of our readers for their assistance.

For the Southern Planter.

MAY WHEAT.

Dear Sir,—Having heard that the early May wheat was successfully cultivated upon the low lands on James River, and wishing to know why it is preferred to other wheat upon such lands, I write to ask the favor of you to make the inquiry through the July number of the Planter, so that we who have such lands may avail ourselves of it; likewise my thanks will be due to any one who will be so good as to give the information asked for.

Respectfully, yours,

QUINTUS BARBOUR.

June, 1842.

OKRA COTTON.

We are indebted to that devoted friend of agriculture, Mr. James M. Garnett, for a beautiful specimen of Okra cotton. We see this species is much lauded at the South for its great growth, early maturity, and fine staple. Mr. Garnett also left with us a parcel of seed for general distribution, a few of which still remain on hand.

PLASTER.

The following is an extract from a letter from a subscriber:

"Will you have the kindness to inform me, through the Planter, whether burning may be substituted for grinding in preparing plaster to sow? If so, what quantity of burned plaster should be sown to the acre? and oblige

J. L. J."

Plaster of Paris is in chemical language a hydrate, that is, it has a peculiar attraction for water, with which it forms a chemical combination. When subjected to a strong heat, this combination is dissolved, the water first boils, and is finally driven off in the form of vapor, and the sulphate of lime falls into an impalpable powder. In this state it is called *boiled plaster*, and is used in the arts, especially by the moulder of busts and figures. The affinity for water

continues so great, that the plaster, like lime, combines with it, or *sets*, as it is termed, whenever it is exposed to moisture, and so again becomes a hydrate. The minute division of the particles thus obtained in the impalpable powder, would no doubt render the plaster very fit for agricultural purposes, were it not, that the first rain would run it together in a substantial mortar.

For the Southern Planter.

BERKSHIRE SOW VIRGINIA.

The main figure in the above engraving, is my Berkshire sow, Virginia, which took the first premium "for the best improved sow and pigs" at the late exhibition of our Agricultural Society. Virginia was purchased from Mr. A. B. Allen, a celebrated breeder of hogs and cattle at Buffalo, N. Y. She was sired by the famous imported boar Reading and out of one of Mr. Allen's "best Shaker sows." She was what the northern breeders call a "reserved pig"—that is one, which they intend to keep for their own use, and on which they set an extra price. An unusually high value, it seems, was placed on Virginia; for to get *her*, my nephew who bought her for me, had to pay one hundred dollars *there*, whereas he got another male hog, nearly her size for thirty. This sum, together with the additional expenses of transportation, made her cost me, when delivered, not far short of one hundred and twenty dollars.

This may seem at first sight, a high price for any one hog. But let us see how the matter stands. I received her on the 22d May, 1841, then (as I suppose) about eight months old. On the 22d July ensuing, she produced five pigs, four boars and one sow. Three of the boars I readily sold when eight weeks old, at ten dollars apiece. One boar and the sow I kept for my own use. I afterwards sold the boar when eight months old for fifty-five dollars, refusing at the same time fifty dollars for the sow.

On the first day of March last, Virginia produced her second litter of pigs, ten in number, as represented in the engraving. Four of these I sold, when eight weeks old at ten dollars apiece; and the balance, I could have sold ten times over at the same price, but chose to keep them.

The reader has now been introduced to Madame Virginia, but as I wish him also to become acquainted with her whole family, as far as they remain with me, I will now inform him, that

one of her first progeny, which does not appear in the engraving, but actually appears at my piggery, is called Sultana, a name *feminised* from her worthy *English* sire, Sultan. I am not fond, it is true, of giving names from *living* characters; yet the name of Henry Clay, of Kentucky, has become so illustrious (no politics) that I have ventured to give his name to the fine pig which appears to the left; and I hope and confidently believe, that this great man will never disgrace my pig, and judging from present appearances, the pig will never disgrace him. The next, to the right is another remarkably fine pig, which from her great beauty, I call Kate Nickleby—then in succession, appear three other fine pigs, called respectively Flora McIver, Rose Bradwardine and Jennie Deans, (of these, my wife has chosen Jennie for her pig) and the little one trying to get his breakfast, is the runt, which from his diminutive size, I call Tom Thumb. Tom, however, is steadily and constantly gaining on the others, so that in the end, I shall not be surprised if he becomes the biggest hog. In that event I shall change his name to something else indicating his great and rapid growth. The other four pigs, are gone to their respective homes, and I hope and request that their proprietors will give them names worthy of them.

In view of the above, then, the case as to Virginia stands thus. She cost me say $120. But she has brought me, in the short space of less than twelve months, for four of her first litter, $85, and for four of her second litter $40, amounting to $125, and if I had taken the sum offered for Sultana, it would have been $175. But I have actually pocketed $125 and have Virginia, Sultana, Henry Clay, Kate Nickleby, Flora McIver, Rose Bradwardine and Tom Thumb, as so much stock in trade. In addition to this, I will state, that poor Sultana has transgressed just as poor frail Effie Deans did, so that in two or three weeks I expect she will "increase her family," and if all things then turn out well, I shall again have other Berkshires to give fanciful names to.

Now I state the above, not as an advertisement, (for except Henry Clay) I would not sell a pig that I own. Five gentlemen have also already requested me to record their names as applicants each for one pig of Virginia's next litter. But I do state (as an advertisement if you choose) that next spring, I expect to have thirty or forty for sale, some of which I hope will be very fine.

J. H. Turner.

P. S.—Since writing the above, I understand that one of the pigs sold, has the name of Prince Albert—a very good name, except it smacks too much of royalty, for a plain republican like me. J. H. T.

EDGE TOOLS.

Nothing pleased us more at the late exhibition of the Henrico Agricultural Society than the display of edge tools from the Factory of the Messrs. Barnes, of this city. They were of every variety, and would have done credit to any establishment in America. We have had occasion before to allude to a similar exhibition on the part of Mr. Hitchcock. With two such establishments in our native State, will her citizens hereafter go out of it for an axe, a chisel, or an auger? Whatever may be thought of the policy of governmental interference, we would venture to suggest to the friends of domestic industry the propriety of giving the preference always to the *home* product, especially, when it is offered as cheap as the foreign article.

HARVESTING.

To the Editor of the Southern Planter:

My Dear Sir,—Has it ever occurred to you to examine accurately what proportion of wheat grown upon an acre of land is actually delivered in the market? I had been induced to think the waste was much greater than was generally supposed, and to satisfy myself I selected a yard square in four forty acre lots; I took especial care that the part selected should not be more than an average, and I then carefully cut with my penknife every stalk upon the yard square. The grain was all gotten out by hand, and carefully measured. The produce of each lot, from which the wheat was harvested in the usual manner, was sold separately, and I delivered in market just about one-third of what should have been the product, reckoning from the product of the square yard. Now is it possible that we lose two-thirds of our wheat crop? These experiments were conducted with great care and accuracy, and I myself was astonished at the result. Will some of your readers repeat them and report the result? I am sure they will not make the loss less than I think I have ascertained it to be. If it can be ascertained to be so great as I imagine it, the next thing will be to consider wherein it can be remedied; for it is certain that to save two-thirds of our crop would justify a very great increase of expense in harvesting.

Your obedient servant,

An Observer.

HOW TO KEEP ICE.

We take, at sunrise, from the ice-house, as much ice as will probably be wanted through the day, and cover it up in some saw-dust placed in a barrel, which sits in the dairy-house. At

night, the size of any given lump is scarce perceptibly diminished. It is a perfect charm. Away with your half ton of lumber, charcoal, and zinc, with which you are humbugged, under the name of "refrigerator."

Kentucky Farmer.

We are happy in being able to announce to the friends of the PLANTER, that we have effected an arrangement, whereby Mr. L. M. BURFOOT, of Chesterfield, becomes joint owner and Editor of this paper. Mr. Burfoot is a gentleman of fine abilities, devoted to agriculture, to which he has been trained from his youth, and is thoroughly versed in its principles. The fact that he is, and will continue to be, engaged in the practical operation of farming and experimenting, whereby new theories will constantly be tested, is calculated to add much interest to the columns of the Planter.

The Editors are determined, that, as far as their exertions can effect it, the PLANTER shall have no superior. To further this object, they propose to occupy the month of September in an agricultural tour to the North, where extensive arrangements will be made to improve even the present superior mechanical execution of the work. Neither pains nor expense will be spared to render the paper such an one as the South is entitled to have, and as they feel assured, she will continue to support.

In the course of their travels, they will have the best possible opportunities of seeing and comparing all varieties of stock, agricultural implements, &c.; they, therefore, offer their services to their friends of the South in attending to any orders, for the purchase of such articles, that they may choose to forward them before they start.

☞ We have taken the liberty of enclosing to each of our subscribers a form of subscription list, in the confident expectation that there is not one from whom we shall not receive some return. All that we ask is, that he will hand the list around in his neighborhood, and enclose it to us when he has obtained as many names as he can procure. The subscribers can afterwards, at any time within sixty days, enclose us the price of subscription, which any postmaster will frank.

Will not the great agricultural State of Virginia sustain a paper devoted to its interests? New York, ever alive to her great interest, supports four, giving to each four times the number of subscribers that we require.

We have before intimated that the present income of the paper barely paid its expenses: we are happy to say, that, since that announcement, our subscription list has been considerably extended; but we are receiving *tens* where we ought to have *hundreds*, and where we believe thousands may be obtained by a little exertion. With the most disinterested sincerity, we declare our solemn conviction, that the prosperity of Virginia is intimately connected with the existence of a cheap agricultural paper, within her limits. We hope, therefore, not only for our own sakes, but for the sake of the "Old Dominion," that our subscribers, one and all, will take a little pride and pleasure in returning our lists well filled. We assure them that their own interests will be advanced by their exertions, for an increased patronage will enable us greatly to improve the paper.

P. S.—At the earnest request of many we have determined to permit a subscription to begin either with the January or the July number, at the option of the subscriber. Where no particular direction is given, we shall presume that it is intended that the subscription shall commence with the second volume, and the back numbers, beginning with January, 1842, will be sent.

Can any one inform us of the whereabouts of a certain Mr. H. F. Hurlbert who has been collecting subscriptions for the Planter which he has failed to pay over. We are afraid some *accident* has happened to the young man.

EDITORIAL NOTICES.

Although very grateful, it is seldom that we have room to return our thanks for the many flattering notices of the Planter in our exchanges—but the last "State Register" from Port Tobacco, Maryland, brought with it so complimentary a review of the June number,

coupled with so kind an offer of an agency for us, that we would be wanting in common politeness if we failed to express our obligations for the kindness of the Editor.

☞ Will our exchanges do us the favor to notice the addition to our editorial department, and the change of terms, by which a subscriber is permitted to commence with the January or July number, at his option.

Richmond Markets, June 30, 1842.

Sales yesterday at the Exchange of $2,000 of six per cent. stock of the State of Virginia, at $90 per hundred.

BUTTER—Mountain butter, wholesale 12½ a 16 cents for firkin; 20 cents for roll.

COTTON—8 a 9 cents per lb.

CATTLE—For cattle on the hoof, from $5 to $6 00, are the general prices. Mutton—There is great variation in the quality; indifferent sheep bring only from $1 25 to $1 50, while the finer qualities bring from that to $3 per head.

FEATHERS—38 a 40 cents per lb. for live geese.

CORN—55 a 60 cents, and very little coming to market.

WHEAT—No sales, and none received. Crops in some sections represented as much injured by rust, in others very little.

HIDES—Green 5 cts. per lb.; Spanish 13 a 16.

IRON—Pig, $25 to $35; Swedes, $100 per ton; English, $85 to $90; Tredegar, (Richmond manufactory,) $90; Up Country bar, $75 a $80 per ton.

LUMBER—Clear white pine $33; refuse clear $25; merchantable $15; refuse last sale at $11 a $12 per M.

LIME—Thomaston selling from wharf at $1 to $1 12½—none arriving. Washington City $1.

MEAL—70 cents per bushel.

PROVISIONS—Bacon—Smithfield and city cured 6 cts.; extra hams 8 a 9 cts.; Western sides 4 a 4½ cents; shoulders 3 a 3½ cents. Lard is scarce and inactive at 7 a 7½ cents.

PLASTER—On the Basin bank $4 50; at the wharf $3, by the cargo.

TOBACCO—On receipt of advices per steamer Britannia, the market opened rather heavily at a small decline on previous rates, but at the close of the day's sales, we thought prices about the same. We, therefore, continue our quotations: $2 50 a $3 for common lugs; good refused and common leaf $3 25 to $4; middling leaf $4 50 to $5; good $5 50 to $6; fine leaf from $6 to $7 50, occasionally a fine manufacturing hogshead sells from $8 to $9.

FREIGHTS.

NEW YORK—Flour, per bbl. 20 cts.—very little going. Coal, 5 cents per bushel. Tobacco, $2 25 per hhd.; boxes 20 cts.; kegs 25 cts.

PHILADELPHIA—Flour, none going. Tobacco, $2 25 per hhd.; 20 cts. for boxes; 25 cts. for kegs, none going. Coal, 6 cents per bushel, Richmond measure.

ON THE CANAL—To Lynchburg and intermediate places, 10 cents per 100 lbs.

EXCHANGE.

FOREIGN—On London, last sale at 9 a 9½ per cent. premium.

DOMESTIC—New York Checks, 2½ a 3 prem.
Philadelphia, 2½ a 3 premium.
Baltimore, 2½ a 3 premium.
North Carolina Bank Notes, par.
South Carolina, 1 premium.
Savannah, 1 discount.
Augusta, 1 discount.
Alabama, 30 discount.
Tennessee, 12½ discount.
Specie, 2 premium.

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THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.*

Tillage and Pasturage are the two breasts of the State.—*Sully.*

C. T. BOTTS & L. M. BURFOOT, Editors.

VOL. II. RICHMOND, AUGUST, 1842. No. 8.

For the Southern Planter.

FOREST TREES.

Messrs. Editors,—I have compiled for the Planter the following list of the principal trees which are to be found in that part of Virginia which lies immediately at the head of tide water, giving the botanical name of each in addition to that by which it is commonly known, and making such remarks about the soil, and use of many, as I have deemed pertinent. The difference between many of the varieties of the same tree are almost entirely botanical, and consequently but little known. The pine is a remarkable instance of this great similarity, and I have known a person who was particularly observant of every thing that concerned timber and timber trees, who insisted that the old field pine was exactly the same tree with the yellow or heart pine, and that when time had thinned out these piny groves the trees would assume the stately form of what we call the sap pine, and would then by degrees be transmuted into a heart tree. Yet, because one has two leaves and the other three contained in a sheath, the botanists tell us that one is the *pinus resinosa*, the other the *pinus tæda*, and of course we, regarding science, must adopt their view of the subject. As to the probable value that your readers may place on this communication you are the best judge, therefore, I place it entirely at your disposal.

1. The white oak, *quercus alba*, is found very generally through the forest without much regard to the nature of the soil, except, however, that it rarely grows on land that is very gravelly. It is far more valuable for timber than any tree which we possess.

2. The red oak, *quercus rubra*, is a large tree, prefers a rather sandy or gravelly soil, and is by no means so valuable as the preceding.

3. The scarlet oak, *quercus coccinea*, is very similar to the red oak and is generally confounded with it. Beside several slight botanical differences, it produces a vast number of ink-balls and in autumn the leaves assume a bright scarlet hue.

4. The black oak, *quercus tinctora*, is general in the forest. I do not believe that any great value can be attached to it as timber.

5. Spanish oak, *quercus falcata*, grows on gravelly forest land, and is of little value as timber, being generally much wind-shaken.

6. Willow oak, *quercus phellos*, is a beautiful tree which delights in a low moist soil and is much esteemed by wheelwrights for its wood.

7. The *quercus humilis* is a dwarf variety of the willow oak.

8. Post oak, *quercus obtusiloba*, is found in the forest, generally, but I think prefers a rather gravelly soil. As its name denotes, it is valuable for posts, stakes for fences, &c.

9. Overcup oak, *quercus macrocarpa*, is to be found on the banks of the rivers, but is not common. It is a most splendid tree, and reaches a very great size, being the largest of the species.

10. Chesnut oak, *quercus montana*, is of little value for timber.

11. Black jack, *quercus nigra*, with us grows in barren slashy land. It is very sectional, (if I may use the expression) being found but rarely in some parts of the country, whilst in others it abounds—is a mark of poor land.

12. Scrub oak, *quercus catesbaei*, generally puts up where the woods have suffered greatly from fire.

13. Shrub oak, *quercus ilicifolia*, which differs considerably in appearance from the last, brings to a conclusion the list of oaks with which I am acquainted. If there are any more amongst us, they differ so slightly from some of these varieties that it would require the closest observation to discover them.

14. The yellow pine, *pinus resinosa*, is to be found scattered everywhere through our forests. It attains great size, and is of great value for plank and other kinds of timber.

15. White spruce pine, *pinus alba*, is not abundant in this section of the country. Where it is plentiful it is very much esteemed for making charcoal.

16. Hemlock tree, *pinus canadensis*, when seen here is found growing on the river cliffs. It is frequently, indeed commonly, but improperly called the yew.

17. Old field or loblolly pine, *pinus tæda*,

18. Grey or scrub pine, *pinus banksiana*,

19. Broom pine, *pinus palustris*, are all three known under the general name *old field pine*, and are of very little value.

20. White heart hickory, *carya tomentosa*, is, I think, the most valuable of the race of hickories, on account of its great toughness. It prospers best in rich alluvial soils, but grows very well throughout the forest.

21. Shagbark hickory, *carya alba*, is a large tree—is quite valuable and very common in our forests.

22. Bitter nut, *carya amara*, is especially remarkable for its fruit, which has the thinnest imaginable shell which is filled with a kernel of the most tempting appearance but so bitter that it is utterly impossible to eat it.

23. Pig nut, *carya porcina*, is very common in our forests.

24. Shell bark hickory, *carya sulcata*. Although this tree is indigenous to this part of the State, yet it is so very rare that I have never met with a single specimen. From the description that I have received of it I think that it is very much like the *carya amara*, but its nut is a delightful one. Hickory is (as every one knows) the best of all fuel.

25. White elm, *ulmus americana*, grows naturally on low and moist lands, but grows very well on high land when it is transplanted. As timber it is very well to use elm for sills that are to be constantly immersed in water; for instance, as facings for mill dams, &c.

26. River elm, *ulmus memoralis*, as its name denotes, is to be found on the banks of small rivers where its spreading and weeping boughs afford a delightful shade to the lounging piscator.

27. Slippery elm, *ulmus fulva*, is by no means as common as the two preceding varieties. It is generally found about the banks of rivers and in uncleared low grounds. It is much esteemed for its mucilaginous inner bark which is considered very efficacious in some affections of the throat and lungs. It may be very easily distinguished by the great similarity of its bark to that of the ash, and by its twigs, which grow in rows on the branches exactly opposite to each other and nearly at right angles from the main branch.

28. Whahoo elm, *ulmus alata*, is chiefly remarkable for the cork-like bark, similar to that on the Dutch elm, with which its branches are winged.

29. Red maple, *acer rubrum*, is a very showy tree, both in the spring when its rich scarlet pendant seed-vessels adorn it and in the autumn when its leaves assume a splendidly brilliant hue.

30. White maple, *acer dasycarpum*, is very highly prized by cabinet-makers—it is susceptible of a very high polish and is a most beautiful wood.

Both of these varieties delight in moist and loamy soils. I have never seen any attempt made to introduce them into pleasure grounds, where they (particularly the first) would be exceedingly ornamental, I have no doubt, however, that it might be done with perfect success.

31. Box elder, *acer negundo*, grows on the banks of the river. Its shape is symmetrical, the foliage dense and of a peculiar and pleasing hue, a yellowish green. It succeeds very well when it is transplanted and is very ornamental. It attains a tolerably great size, but I rather think that the timber is of no value.

32. Sweet gum, *liquidamber styraciflua*, commonly grows in moist bottoms—it attains great size, but is almost entirely useless both for timber and for fuel.

33. Forest poplar, *linodendron tulipifera*, is one of the most magnificent of trees. Its superb size, its beautifully symmetrical form, its dense, rich and luxuriant foliage and the great beauty of its flowers when it is in bloom should render every one anxious to have it about his house, which he may do with but little care, for though a native of swamps and moist land, it grows perfectly readily on almost any soil to which it may be transplanted. The poplar has not only the recommendation of being beautiful but it is of great value, the plank made from it being equal to any for weatherboarding.

(To be continued.)

MILCH COWS.

In a letter from a gentleman in Scotland to the Editors of the Albany Cultivator, the writer desires to correct a mistake which he says exists in this country, viz: that the Durham short horn cattle are esteemed great milkers in Great Britain. *We*, he remarks, consider the superior excellence of high bred Durhams to rest upon their fine shape, great size, early maturity, and aptitude to fatten. We have no doubt that exactly the same state of things exists in Great Britain that obtains in this country, that is, there is a division in opinion, there as well as here, upon the merits and properties of this breed of cattle. We believe, too, that the two parties, both here and there, although apparently diametrically opposed, are both right. Those who contend for the great milking qualities of the Durhams are certainly right, if the possession of this property by very many of the individuals of the stock will justify them in the general assertion; and the same remark may be made, with equal or greater force, of those who contend for the opposite quality of aptitude to fatten. The explanation of the apparent paradox lies in this; the Durhams are a stock of cattle bred and crossed judiciously, with an eye to securing the valuable qualities of the animal. But the valuable qualities of horned cattle unlike any other quadruped are of two characters, generally supposed to be opposite and inconsistent in their nature; they furnish a solid and fluid nutriment to man. The shape and form which

promises to afford the one to the greatest advantage, is very different from that which indicates the other; but being nearly equal in value, the judicious breeder has retained either the one or the other, as he happened to meet with them. The consequence is that the present race, taking sometimes after one ancestor and sometimes after another, sometimes displays the milking, and sometimes the fattening form. 'Tis true, that in the south of Britain, where this stock is chiefly raised, beef is more valued than milk, and, therefore, we believe, that both there and here, the property of making the one, predominates over the tendency to yield the other, simply because this quality has been most carefully cultivated. We know whole herds of this stock in this neighborhood, purchased chiefly for their supposed universal milking qualities, where not one individual in ten turns out a valuable milker.

But the Durham is unquestionably a highly artificial stock, requiring a continuance of the high keep and generous care that have been so instrumental in bringing them to their present state of perfection. We believe that there are several breeds much better adapted to the scanty herbage of Eastern Virginia, and we concur fully with the writer, to whom we have alluded above, in his national predilection for the Ayrshires. He says: "The Ayrshires are a diminutive variety of Short Horns. They are in great repute as milkers, and are fast spreading over these islands. They are in every sense 'the poor man's cow.' They thrive and give a good portion of milk upon *very short commons*, where larger breeds would starve. There are also high breds or well breds among the Ayrshires, as in the Durhams, and with similar qualifications, with the exception of size."

For the Southern Planter.

RIVER MUD.

Messrs. Editors,—Some time last year I promised a gentleman who was travelling with me on the canal packet to give him the result of an experiment I was making with river mud as a manure. As other persons may likewise be pleased to hear how it succeeded, I have concluded to give the information through the Southern Planter.

I selected the poorest part of my low grounds, near the river, for a tobacco lot; a part of this lot I manured with farm-pen manure, made during the winter; and the remainder with earth taken from near the margin of the river, which had been deposited in the course of a few years; putting on about double the quantity. The tobacco on the whole lot was very fine, nor was I able to decide which part was best. From this experiment I came to the conclusion, that double the quantity of rich deposite from James River was equal to coarse farm-pen manure.

I have seen in your paper, objections to the practice of hauling leaves to the stables, farm-pens, &c.; and it is urged as the better plan to carry them on the land intended to be manured at once. To these objections I would say, that if oak and chesnut leaves are thus used, the first hard wind, will carry them back to the woods, or deposite them in the corners of the fences; and when ploughed in immediately, which is the only method of saving them, according to my experience, but little benefit is derived; whereas if used as litter in stables, farm-pens, &c. they not only benefit the stock, but are soon converted into fine manure, having absorbed and being saturated with the strength of the dung and urine; and one load used in this manner I consider worth ten hauled from the woods and ploughed in. It may, however, be urged, that the planter has not time to haul the leaves twice. I answer, that if a small force be kept as improvers, he can always find time not only to litter his stables, farm-pens, and hog-pens, (and the quantity of manure made by this means during the year would surprise the inexperienced) but he may remove the rich earth from his ditch banks, to his poorer lands. A force of this kind is always ready to assist in times of pressure, such as planting tobacco, saving clover, harvesting wheat, &c. indeed, I consider my *improvers* as the most profitable part of my laborers.

An experiment I made with ashes as a top dressing on grass, is perhaps worth giving to the public. Having made a large clearing during the winter of 1841, I had the ashes where the log heaps were burnt, as soon as they were cold, taken up and removed to a poor field which was sowed with clover and herdsgrass, and about twenty-five bushels per acre spread over a part of it. The grasses on this part of the field have taken well, and are quite luxuriant, considering how poor it was previous to this top dressing; whilst on the part on which no ashes were put, they have a much feebler appearance, and in many places died during the last summer, and galled spots now disfigure the field.

Respectfully yours,

RICHARD G. MORRISS.

Buckingham, June 25, 1842.

MANGE IN DOGS.

Mr. R. G. Hill, of Caroline, called on us to say that he had resorted to the remedy recommended by Mr. Goode at page 168 of the first

volume of the Planter to relieve a very valuable pointer of the mange and that, instead of curing, it had *killed* him. The fatal effect Mr. Hill attributed to the ointment, as he feels satisfied that arsenic may be given to dogs in any quantity with impunity.

Arsenic is undoubtedly innocuous to dogs, in general; their exemption from its generally fatal effects, is supposed to be derived from a peculiar facility they possess of throwing it off the stomach, by vomiting. If any particular state of system weakens this power, the arsenic may be retained, and will certainly then go on with its work of destruction.

We are inclined to think the dipping in a tan vat, recommended by Dr. Dupuy, is a better and safer remedy than Mr. Goode's.

For the Southern Planter.

MODE OF APPLYING MANURE.

Messrs. Editors,—Of the various methods in which manure is applied to land, that of covering it broadcast is generally esteemed the best, both for the growing crop, and the permanent improvement of the soil. But however heavily it may be put on in this way, there is always liability of an irregular crop being produced. Some spots in the same field require a good deal more manure than others. Some appropriate with more readiness the strength of the manure, and other parts will have less manure put on them, however particular a person may be in spreading it. The consequence is, that a very rich lot frequently does not produce such an average crop as the labor expended on it would seem to promise.

I have for a few years past endeavored to remedy this evil, by applying a hand full of well rotted manure to such plants as look puny and ill grown, about the period when the crop is generally hilled up for the first time. At this period, if not before, the field will readily exhibit this difference, and the additional labor of putting it on is not so great as would appear at first view. The manure may be hauled out to the most convenient spots on the edges of the field at any time during the spring, and the small hands with baskets, can soon put the manure around the bad looking plants just before the larger hands, while hilling it up. In fact it is sometimes applied when the tobacco is wed down, and whether covered with dirt at that period or not, it is perhaps just as good a plan. The effects of manure, thus applied, if the weather is seasonable, is truly astonishing. The plant begins at once to grow, and if the weather is not too dry, will soon be as good if not better than any other in the field. The advantages, therefore, will at once appear.

In order to obtain a very heavy crop of tobacco from a piece of land, every plant must count for itself. If those few plants which grow off badly at first, were finally to come out, they could not attain to the weight, if they did to the size, of those around them. The larger plants shade them too much for the leaves to grow broad, or for the plant to be very heavy. I have never seen an irregular piece of tobacco turn out well in weight.

Finally, Mr. Editor, allow me to congratulate you and the planters upon the increasing circulation of your valuable paper over our State. It is just such an one as our agricultural interest demands. The contributions are generally of a practical character, and no long philosophical theorizing pieces are admitted, to take up room, and to bother the plain planter. There is a spirit of improvement gradually extending itself over the State, and I doubt not that interested motives, as well as the force of circumstances, will push it forward, until we shall witness its effects to a greater or less extent into whatever part of Virginia we may travel.

A Country Subscriber.

GRUBS.

From an old Virginia turfman, who is too modest to give his name to the public, we have derived the following statement. He says for the last nine or ten years he has been making use of the following remedy for grubs, with instantaneous and invariable success.

Upon a piece of chalk, the size of a cubic inch, he pours a pint of moderately strong vinegar; when the effervescence has ceased, he empties it into a bottle, and drenches the patient.

We know no gentleman upon whose judgment or statement we would sooner rely than the one affording this recipe, and he esteems it so highly, that he called at our office, at some inconvenience, expressly that it might be given to the public.

INFLAMMABLE GAS.

The lightness of inflammable gas is well known: when bladders of any size are filled with it, they rise upwards and float in the air. Now it is a most curious fact, ascertained by Knight, that the fine dust, by means of which plants are impregnated one from another, is composed of very small globules filled with this gas—in a word, of small air-balloons. These globules thus float from the male plant through the air, and striking against plants of the other sex, are detained by a glutinous substance pre-

pared on purpose to stop them, which no sooner moistens the globules than they explode, and their substance remains; the gas, which enabled them to float, flying off. A provision of a very simple kind is also in some cases made to prevent the male and female blossoms of the same plant from uniting; this being found to injure the breed of vegetables just as breeding "in and in" spoils the race of animals. In this case, it is contrived that the dust shall be shed by the male blossom before the female of the same plant is ready to be affected by it; so that the impregnation must be performed by the dust of some other plant, and in this way the breed be crossed. And the levity of the gas with which the globules are filled is most essential to the operation, as it conveys them to great distances. A plantation of yew-trees has been known in this way to impregnate another several hundred yards distant.—*Brougham.*

SOILING.

A writer in the "American Farmer," comparing the advantages of soiling and grazing, makes the following remarks:

"In grazing, an acre of *good* grass is considered necessary to the support of each head of stock; of *ordinary* grass one and a half, or two acres are not more than enough. In England, where the soiling system has been very generally adopted, and carried on with care, according to Mr. Curwen's experience, three acres of grass cut and carried, supplied 30 milch-cows, with 28 lbs. each, daily, during a period of 200 days. To have supplied a similar number of cows, with a like quantity for the same period, would in the usual way of management, have required 75 acres of land for its production. And to have grazed such a number of cows at liberty that length of time, must, it is obvious, have taken a very considerable number of acres. Again he says:

"'This vast produce from so small a piece of land, may at first appear very problematical; but experience and good management will soon convince the dairyman that he may realize the advantage, great as it may appear. To enable the meadow to support this exhaustion from the scythe, it should be cleared at the end of every autumn, from all kinds of weeds and rubbish, and fresh grass-seeds of the best kinds, cast upon the bare places. A coat of good rotten manure, or ashes, should then be allowed, consisting of all that can be collected from the household, or procured elsewhere, mixed up and augmented with virgin earth.'

"If we admit that the number of acres assumed by Mr. Curwen, three and a half to each cow, be too great, and take one, the minimum quantity named by us, as the proper one, then there will still be a saving of 27 acres of grass by the soiling over the depasturing system. And if we reserve this grass to be cut for hay, it will give a sufficient quantity to carry the cows through the winter, or foddering season; so that, to this amount there will be a clear gain. Then let us add the immense quantity of manure, which will be accumulated in the soiling-yard, and we cannot hesitate a moment in coming to an opinion as to the relative merits of the two plans of feeding stock; for all will admit that summer-made manure is very far better than that made in winter, as also that the most of the droppings in pastures is lost, by means of evaporation and rains, to all the available purposes of the farm, and no one will contend, that the cost of the price of half the labor of one hand, and that of a horse and cart during the time, should be considered to be of more value than the savings we have pointed out. Suppose that, in addition to the accumulation of manure from the droppings of the cattle, the yard be covered some nine or twelve inches deep with mould or other earth from the woods, or head lands, to act as absorbents of the cattle's stable—we say, suppose this be done, and we will venture the assertion, that every square foot of such mould or earth would be so saturated with the urine of the cows as to be equally as valuable as their droppings. Thus, then, in whatever light we may consider the subject, the advantages in favor of soiling are apparent to the judgment.

"It may be urged against the soiling system that it would not afford the requisite exercise to the stock. We are free to admit that exercise, to a certain extent, is necessary to the health of the brute creature, but at the same time we are free to maintain, that all that is indispensably necessary to ensure health and comfort, may be obtained in a yard of a fourth of an acre in extent, and we doubt much if regularly fed and watered therein at stated hours through the day, and salted semi-weekly, whether they would not maintain as much physical vigor thus confined, as they would roaming at large in a pasture of many acres. It is questionable with us also, whether they would not yield fully as much if not more milk and butter. At all events, the experiment is worthy of a trial, and we, therefore, commend it to our readers' consideration."

FARM ACCOUNTS.

What would be thought of a merchant, who did not keep a set of books, and who, at the end of the year, could not tell whether a certain branch of his business had been productive or not? And why is not a farmer as much interested in the result of his operations, as a merchant? The pettiest shop keeper must have a

clerk to keep his books, with double entries, and yet the most extensive farmer, operating with thousands, keeps no record of his proceedings. The manufacturer opens an account with each department of his business, charging it with the stock employed, the expenses incurred, and crediting it with its products. At the end of the year, he sees at a glance whether it has been productive or not, and concludes to lop it off, or to extend it. So should the farmer open an account with every crop he cultivates; charge it with the outlay, and credit with the proceeds. At the end of the year, he should take another account of the stock on hand, and he will see, at once, how he stands on the year's operation. If he is unable to keep so simple an account, he should employ a clerk; (although he had better go to school himself,) he certainly needs his assistance as much as a merchant. But there is no difficulty about the matter, and extracts from a farmer's books well kept, would form the most valuable contributions to an agricultural paper.

For the Southern Planter.

CORN RAKES.

Messrs. Editors,—I desire to bring to the notice of your corn planters an implement from which I have derived the greatest benefit in the cultivation of my crops. I allude to the common hand rake. I am aware, sir, that it is not new, and that it has been tried and discarded by some; but this I am sure has happened only where the experiment has not had a fair trial.

Corn is frequently much infested with grass before it is large enough to be ploughed, especially in a rainy season. Now, whilst it is so low that the plough would cover and smother it, I run a simple coulter on each side, as close as possible to the corn, then with fine rakes the hands proceed from one end of the row to the other, dragging out the loose grass, pulverising the clods, and freeing the corn. This operation is performed with great rapidity and the effect upon the crop is astonishing. By this means, I can work my corn two, and sometimes three or four, weeks before my neighbors; and whilst their fields are full of grass, "waiting for a season," mine are clean and fine, affording all the nutriment of the soil to the crop. I would not be deprived of the use of my rakes, one year, for five hundred dollars.

Your obedient servant, E. G.

We know the writer of the above, and know that he has the reputation of a skilful, intelligent, practical farmer. Individually, we should be inclined to think highly of his plan, but we know some of our best farmers who disapprove of it. We should be glad to hear their objections.

IMPROVEMENTS IN BLACKSMITHING.

Sawing heated iron or steel, is not known or thought of by blacksmiths; and when several forks or branches are to be formed from one stock, even if the branches are required to remain eventually, nearly in contact and parallel to each other, the usual method is to split the end of the iron with an awkward cold chissel, thereby deforming the edges of each branch; on which account, the branches must be bent asunder for the purpose of hammering, squaring and shaping the edges of each; after which they are brought together as well as may be, usually retaining a roughness of form, if not a deficiency of size and strength, near the juncture of the branches. Instead of this tedious process, the iron when heated may be put into a vise, and the end may be readily slit with a suitable saw, which would save much labor of hammering and filing. A saw for this purpose should be made thicker at the edge than at the back, and with uniform teeth about one-twelfth of an inch apart. The saw, when used, must be often dipped in water, to prevent its becoming too much heated. There is also a method of cutting or sawing hardened steel, which is not so generally known as it should be. A circular piece of common thin iron plate, or sheet iron, being adjusted in a lathe, or by other means put into a violent rotary motion, it will readily cut off a file, a cutting tool, or a tempered steel spring, without drawing or reducing the temper. There is much mystery in the wonderful effect of this buz, and its cutting property is attributed to electricity. It answers a very convenient purpose, however, when the shape and form of articles are required to be altered, without affecting their temper. It furnishes a convenient method of cutting teeth to large saws, but is objectionable on account of the newly cut surfaces being left so hard that they cannot be readily filed by a common file. Connected with the subject of "mysterious effects," it may be stated that a bar of iron of almost any size, may be instantly sundered while hot, by the simple application of a piece of common roll-brimstone. A knowledge of this fact will be useful, when some piece of iron work is required to be severed, but which, as is sometimes the case, is so constructed and situated that no ordinary chissel or cutting tool can be brought to apply. Holes may be perforated through bars or plates of heated iron, by the application of a pointed piece of brimstone, and that instantly. This phenomenon is curious, although it seldom affords much practical utility.—*Mechanic.*

SANDY SOILS.

The Editor of the Massachusetts Ploughman being called on for his advice upon the treatment of sandy soils that will not hold manure, recommends the application of ten cords of clay, or five cords of leached ashes, to the acre; the coating of clay, if it can be had conveniently, to be put on some time in autumn. But there is no crop he says so appropriate to light, sandy soils as buckwheat.

"This is quite as sure a crop as any of the English grains, and our poorest lands will produce it. In Virginia and in New York this grain succeeds well—even the worn out soils of the Ancient Dominion that will yield but five bushels of corn per acre will give double that quantity and value of buckwheat, and at less than half the expense.

"This is a summer grain and it will not impoverish a poor soil. But turning in one crop in June and sowing another on the furrow, to be harvested, a poor soil will improve from year to year, and twenty to thirty bushels may be counted on as an average yield. We have thousands of acres of such lands in Massachusetts which now lie idle. Buckwheat usually commands $1 25 to $1 50 per bushel every spring though nobody is ready to buy it in autumn. But it may be used by every farmer at home, and a bushel of it is worth more for hogs and for hens than a bushel of corn.

"Buckwheat should be sown in the latter part of June; some farmers sow as late as July 4th. When a field is kept for the buckwheat the scattering seeds of the previous year will sometimes be sufficient without sowing any in June. One bushel per acre will be sufficient where no seed is in the ground; half a bushel is the usual quantity in other cases.

"The buckwheat may be saved for the grain, or it may be ploughed in when full in blossom to enrich the soil, and grass seed may be sown on the same ground in August, with or without other manure."

Sorrel, he says, never raises its head where Buckwheat is sown. If the land is naturally too light and porous for grass, keep it for Buckwheat from year to year, and the sorrel will never be troublesome. This product will grow and spread sufficiently even on poor land to smother all other plants on sandy loams.

For the Southern Planter.

CORN.

There is no one subject in agriculture that is more peculiarly interesting to us than the cultivation of Indian corn. In the first place, it is the national crop; in the second, it bears with it a spice of romance, as being intimately connected with that race upon whom only the sacred hand of antiquity has yet impressed the stamp of poetry in this *new* world; but thirdly, and chiefly, because it is believed to be the most valuable vegetable growth, take it all in all, cultivated by the hand of man. I do not believe either that our savage predecessors, or our tobacco making ancestors, ever brought the cultivation of this noble vegetable to perfection. I am very sure that the system of neither the one nor the other was of the character best adapted to the present state of our soil. Neglected, as to a certain extent, this valuable crop now is, still, in point of profit, it need not shrink from a comparison with either of its haughty rivals, wheat, or tobacco. Facts and experience, which settle the claims of high and low, will prove the corn growing to be as independent and prosperous as any other interest in the State. But it is my settled conviction, that a thorough examination into its nature and character would induce an improvement in its cultivation, that would place this vegetable of indigenous growth upon a much more elevated position than it even now occupies. It is very true that thousands of intelligent farmers have been for hundreds of years cultivating this simple crop, and it would seem wonderful that there should be any thing yet to learn about it; but that no fixed principles have been as yet established, is vouched by the fact that there are still as many opinions about the simplest points in its management, as there are different cultivators. That this variety of opinion exists, arises, I believe, from the fact that, until the late establishment of agricultural papers, men ploughed, sowed, and reaped, without thinking at all; at any rate, without receiving from each other the advantages of their mutual observations. Until within the last ten or twelve years, the darkness of the middle ages covered the agricultural history of America. Indeed, it was not until our exhausted soils forced us to bring mind to the assistance of matter, that our farmers began to think at all, and it was not until the general establishment of a medium of communication, that any thing but the wildest guesses, founded upon the loosest facts, occupied the cultivators of the earth.—Mortifying as this picture of ignorance may be to many of your older readers, it is nevertheless true, and when they reflect, how they themselves were in former days immersed, soul and body, in *politics*, they will be forced to concede that the science of agriculture found little space in the minds of their contemporaries.

But, thanks to the good sense of our deep-thinking, practical people, as the stern necessity of an exhausted soil demanded a different course of conduct, they have lately begun to investigate the secrets of the great business in which

they are employed, and hence it is, that, although we have been cultivating corn for hundreds of years, we are now just upon the threshold of discovery with respect to its nature and character.

These remarks, which I hope, if not very flattering, will not prove very tedious, have been elicited by reading an excellent essay on the subject in the "Southern Agriculturist" from the pen of Dr. L. R. Sams, of South Carolina.

Dr. Sams, as the result of several investigations upon the roots of corn, found them to consist chiefly of perpendicular roots, from which numerous smaller ones proceeded horizontally. The depth, number, and proportion, of the perpendicular roots, the Doctor found to depend very much upon the nature of the soil in which they grew. In a very light, sandy soil, incumbent on a loose subsoil, he found an average of twenty-five perpendicular roots, from three and a half to four feet long. The size and extent of the lateral roots he found to be dependent upon the fertility and moisture of the surface soils. In a poor soil, of a dry season, they did not exceed two or three inches in length, while many were much shorter; on the other hand, in a rich moist soil, these lateral roots were very much increased, not only in numbers, but in all their dimensions, a large proportion of them extending from one to two feet or more from the stalk.

On a close, heavy soil, based on a stiff subsoil, the perpendicular roots were found more numerous, but shorter, reaching an average depth of only two feet. The horizontal roots, though of smaller diameter than the perpendicular, were so much more developed than in the former case, especially when favored by a moist and mellow soil, as to traverse and occupy the entire intervals (a space of five feet) between the rows.

The practical deductions that Dr. Sams draws from these facts, are, that if the soil is made rich and mellow to a considerable depth, the perpendicular roots will naturally penetrate to that depth, and as he found that the extension of the side roots along the surface was chiefly a substitute of nature for the obstruction of the perpendicular roots, he concludes, that whenever free passage is afforded the latter through rich ground, that this plant will be furnished by these means with food and moisture, even during a drought; when the lateral or surface roots, that would otherwise supply their place, would be entirely parched and killed. Again, where a free descent is afforded through a mellow soil, the roots will be found almost wholly within a circle of two feet, of which the stalk is the centre; consequently, present economy would recommend the application of manure within that space. On the contrary, where, from the nature of the subsoil, the support is derived from the horizontal roots, the application of manure in the hill would fail to furnish the roots that had extended beyond its influence with their food at the most critical period of the plant, viz: the filling of the ear. Firing, Dr. Sams considers, as nothing more than the failure of a supply of food and moisture to this most succulent and sappy of all the vegetable tribe; and close planting leads to this fatal consequence, only, because, in our usual mode of cultivation, the plant is dependent for a supply of food and moisture on its lateral roots, which can only find a sufficient supply for one stalk within a given space.

One thing is certain, that very large crops can only be obtained by close planting, and it is a great desideratum to know how that can be effected without the danger of firing, that usually attends it in this region.

It is only by a strict examination into facts with all their attendant circumstances, such as the world is indebted to Dr. Sams for, that any correct or philosophical conclusions can be arrived at. He may possibly have erred in the inferences he has drawn, but the agricultural community are at least indebted to him for the communication of the interesting facts he has observed.

Yours, with the best wishes for the success of your useful and practical paper,

A Corn Grower.

PLASTER.

Mr. C. Robinson, in the Farmers' Gazette, adds his testimony to the value of Plaster. He thinks that doubts of its efficacy have arisen only from the use either of an inferior article, or of one badly ground—he asserts that it will be comparatively inoperative, unless ground as fine as flour. He particularly cautions farmers against the use of the coarse, gritty article that is generally brought in casks from the State of Maine.

For the Southern Planter.

BLACK SHEEP.

Messrs. Editors,—A neighbor selected a very likely young ram which he designed "turning out" and at shearing time made known such intention to his "headman," Peter. The shearing being over, Peter came to his master and said the lamb he had selected would not do to "turn out" unless he wished to have black sheep in his flock. How do you make that out, Pete? said his master; the lamb is the whitest in the flock. That may be, replied Pete, but I tell you half his lambs will be black, *for he has a* BLACK STREAK *under his tongue.* The master and myself in talking upon the subject came to the conclusion that a greater man than Pete had advanced the same opinion, and accordingly

we picked up an old Virgil and commenced the search. After no little trouble, we found the following:—(Geo. 3—387.)

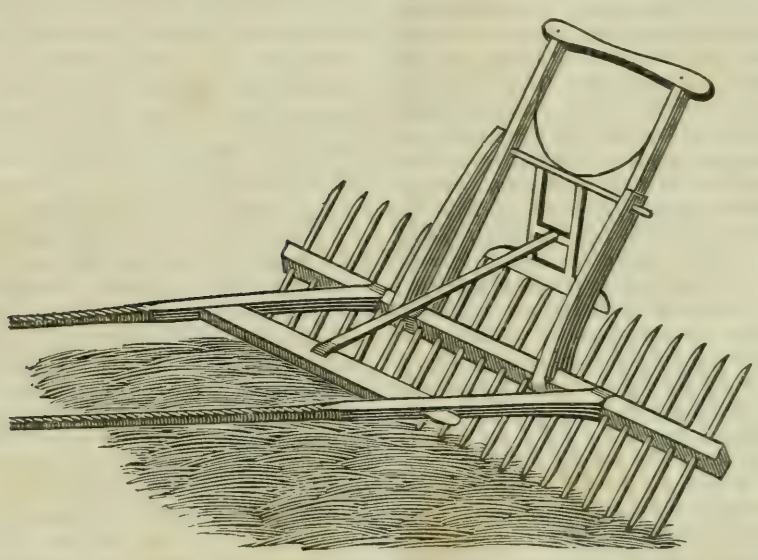
"Illum autem, quamvis aries sit candidus ipse,
Nigra subest udo tantum cui lingua palato,
Rejice, ne maculis infuscet vellera pullis,
Nascentum."

The English of which, I presume is, but, though the ram himself may be white, reject him, under whose moist palate there is a black tongue, that he may not darken the fleeces of the lambs with blackish spots.

Whether Pete borrowed the idea from the "Mantuan Bard" or not is a matter of no consequence. The question for you, Mr. Botts, or some of your correspondents is—is the idea correct. We have, you see, the opinion of a "book farmer" and a practical one—of an ancient and a modern—a great man and a little one.

Nottoway. P. B. W.

REVOLVING HORSE RAKE.



We here present our readers with a cut of the revolving rake so highly spoken of by Mr. Fontaine, in the July number of the Planter. The rake is carried forward with one set of teeth in front, until they are filled; the catches at the sides of the handles are then thrown up, and the points of the teeth in use directed to the ground. Of course the other set of teeth are drawn over, the rake revolving on the first set, which are thereby relieved; the catches are again fastened, and the workman proceeds with his operation.

This rake is highly esteemed to the North, and may be found in any agricultural store—price, from eight to ten dollars; but no farmer ought to go off his own plantation to have it made. It is constructed almost entirely of wood, and may be made by the rudest carpenter. We have received the model, which will be exhibited to any gentleman wishing to see it.

For the Southern Planter.

PHILOSOPHY.

What nonsense is daily put forth under color of this august name. The desire to explain every thing upon *philosophical* principles is the rage of the day. So far has this mania extended, that the universal solver of all difficulties hardly waits for the ascertainment of facts, but is equally ready to explain phenomena that do or do not exist. Nowhere is this feeling more prevalent than amongst the contributors to agricultural papers. The desire to secure the title of *philosopher*, gives rise to a thousand theories for the support of which *facts* can be found, as plenty as blackberries. The simplest and most

familiar occurrence is now a-days explained upon scientific principles, and the poor farmer, who reads an agricultural paper, is lost in the mazes of metaphysics.

These ideas have frequently occurred to me before, but they were impressed on my mind with more than usual force on reading a communication in the last Cabinet, upon the "Pressure of the atmosphere," signed by D. C.

The amount of the article is, that D. C. recommends all pedestrians to seek a rough, unequal path instead of a smooth and level one, as he found by experience that his feet were blistered and his legs wearied much sooner on the latter than the former. Then D. C. proceeds to account for this fact, of course, in the most approved form; he had read a dialogue between Frank and his father, in which Frank was informed that when two smooth and level surfaces were brought in contact, so as to exclude the air from between, the pressure of the atmosphere around them induced them to adhere, and made them difficult of separation. The philosophic mind of D. C. immediately came to the conclusion, that the bottom of his foot and the smooth path were two such surfaces, and it was very evident that for the last hour he had been raising a weight of fifteen pounds to the square inch upon his foot, which if it is as broad as it is flat, must have incommoded him exceedingly, beyond a doubt. To test his theory, he immediately tried a rougher path, and *of course*, the pressure of the atmosphere was counteracted by the air now admitted between his foot and the ground, and the wearied and laboring man found immediate relief from his heavy burden, and went on his way rejoicing.

This foot of D. C.'s is only excelled by the traditional record of the lady, the hollow of whose foot made a hole in the ground.

By such stuff are the readers of agricultural papers frequently gorged, until it is no wonder that they conceive a distaste to book farming and agricultural papers. But justice requires me to state that no paper is less liable to this charge, in the general, than the highly practical one in which this communication appears. It deserves all the commendation you, Mr. Editor, have bestowed upon it, and I have only noticed the piece in the manner I have, to encourage you in the plan you have adopted of furnishing your readers with plain practical observations in the place of long, fine spun agricultural theories.

Yours with respect,

ANTI PHILOSOPHY.

COTTON.

In a former number we adverted to the difference of opinion that existed upon the prospect of the future cotton trade in America. Many fears are entertained, and expressed, that we are to be superseded in this important article of commerce by the products of other countries of greater supposed advantages. What seems a little extraordinary is, that these fears are confined to the manufacturing interests, and do not extend at all to the planters of the South, who are so deeply interested in the subject. When we remember that cotton alone has constituted in value more than two-thirds of the exports of the domestic produce of the United States, this question becomes one of the greatest national importance, and of the most universal interest; and we have adverted to it again, chiefly, for the purpose of laying before our readers the following extracts from a speech of Mr. Calhoun's, in the Senate of the United States, which strikes us as affording the soundest and most dispassionate view of the subject, which has yet been submitted to the public. After quoting the authority of an English paper to show, that the late attempts to extend the culture of cotton in India were likely to result in total failure, he proceeds to say,

"In confirmation of the opinion of the writer of the article, that of intelligent individuals, well acquainted with the country, might be added, who speak with confidence that, taking price and quality into consideration, we have nothing serious to apprehend. We might, indeed, have something to fear during the continuance of the Chinese war. That country is the principal market for the cotton of Hindostan, and while it remains closed, the cotton intended for its market may be thrown in such quantities on the European, as may materially depress the price. But the present relation between Great Britain and China cannot long continue. It cannot be doubted that the former will at last succeed in opening the market of China to the commerce of the world, to a much greater extent than it has ever been heretofore—when, so far from competing with us, the cotton of Hindostan will not be sufficient to supply the demands of that great market.

"But I am not ignorant that we must rely for holding the cotton market on our superior skill, industry, and capacity for producing the article. Nearly, if not altogether, one-half of the solid contents of the globe is capable of producing cotton; and that too in the portion the most populous, and where labor is the cheapest. We may have rivals everywhere in a belt 70 degrees at least, lying on each side of the equator, and extending around the globe. Not only the far East, but all Western Asia, quite to the 35th or even the 40th degree of latitude, a large portion of Europe, almost all Africa, and a large portion of this continent, may be said to be a

cotton producing region. When the price of cotton rises high, a large portion of that immense region becomes our competitors in its production, which invariably results in a great fall of price, when a struggle follows for the market. In that struggle, we have ever heretofore succeeded, and I have no fear, with fair play on the part of our own government, we will continue to be successful against the world. We have the elements of success within us. A favorable soil and climate, a plenty of cheap land, held in fee simple, without rent, tithe, or poor rates. But above all, we have a cheap and efficient body of laborers, the best fed, clothed, trained, and provided for, of any in the whole cotton growing region, for whose labor we have paid in advance. I say paid for in advance, *for our property in our slaves, is but wages purchased in advance, including the support and supplies of the laborers*, which is usually very liberal. With these advantages we may bid defiance to Hindoo or Egyptian labor, at its two or three cents a day. Ours being already paid for, is, as far as the question of competition is concerned, still cheaper, to say nothing of its superior efficiency, its better and more skilful direction under the immediate eye of intelligent proprietors, of cheap, unincumbered land, favorable soil and climate, and greater facility and cheapness of transportation to the great markets of the world. But this is not all. We have another and great advantage. There is not a people on earth who can so well bear the curtailing of profits, as the Southern planters, when out of debt. A plantation is a little community of itself, which, when hard pressed, can furnish within itself almost all of its supplies. Ours is a fine provision country, and, when needs be, can furnish most of its supplies of food and clothing from its own resources. In prosperous times, when the price of our staples is high, our labor is almost exclusively directed to their production, and then we freely and liberally part with their proceeds in exchange for horses, mules, cattle, hogs, and provisions of all description from the West, and clothing and all the products of the arts with the North and East; but when prices fall, and pressure comes, we gradually retire on our own means, and draw our own supplies from within.

"With these great advantages, it is not wonderful, that in all the great struggles that we have had for the cotton market, (they have been many and great,) we have ever come off successful. It is incident to that great staple article, cotton, the first in the whole circle of commerce, to be subject to extraordinary vibrations of price from the causes to which I have alluded. At one time prices are high, and profit great, and at another low, and the profits small. It can be permanently cultivated only by those wh can best go through these great vibrations."

For the Southern Planter.

"WHAT DO YOU GAIN BY SUBSCRIBING TO AGRICULTURAL PAPES?"

Messrs. Editors,—I was permitted a short time since, to listen to an interesting discussion of the question which heads this article. A servant having entered the room with a bundle of newspapers, the political ones were devoured with greediness. What periodical is that? was asked, after a while, by one of the party, at the same time pointing to a very neat little publication that till now had lain unnoticed on the table. The "Planter," was the reply. This led to the following conversation:

Capt. A. What Mr. B. do you gain by subscribing to agricultural papers? You seem not to have any cows that will yield eight gallons of milk per day.

B. No, I have not; and indeed, under present circumstances I am pretty well satisfied if two of mine yield that quantity.

A. Then why waste your money in subscribing for, and your time in reading such papers? None of your hogs that I have seen, seem likely to weigh 365 lbs. at twelve months old.

B. True, I have none that will reach that notch—yet I believe others have had such, and moreover that you and I may have such if we will but take the necessary pains.

A. Certainly, *if we will but* send to Mr. A. B. Allen, of New York, for a $500 boar and a couple of $200 sows—then feed them and their offspring during the summer on cream and peaches, in the winter on plum puddings and—

B. And without all that trouble and expense, neighbor A. The truth is, my friend, you seem to have formed a very erroneous opinion of agricultural papers. Were you to read them attentively, you would be better able to *select* the information best suited to *your parttcular situation.*

A. Well, neighbor B. you have been a constant reader of them for eight or ten years, suppose you sum up in as few words as possible the actual amount of benefit you have received from them.

B. Why, sir, the age of miracles has long since passed by, and of course you do not expect any have been wrought by me. But as you desire it you shall be gratified, if not improved. In the first place, from them I imbibed a *desire for improvement.* Every man who reflects at all, *is* convinced that the system of farming in Virginia needs a material change. It will not do to pursue "the old track" any farther. To say that our fathers did well (which is not true of all of them) is no evidence that we must likewise do well. Some admit these facts but break forth with the doleful exclamation, "we can't help ourselves." From the experience of others, as detailed in agricultural papers, we are convinced that industrious, sys-

tematic farmers are successful ones. It is the province of these papers to point out the proper systems—to detail the results of unsuccessful as well as successful experiments—to disclose useful discoveries—to collect, embody and send forth the experience of others for the benefit of such farmers as you and myself. They serve as monitors to remind the farmer of his various duties—to excite him to continued and increased activity. The farmer's life is a varied one, yet he too has to spend some dull, monotonous moments. How are these beguiled, yea how profitably spent, if we but have these unobtrusive visitors, whose voice is soft, whose conversation instructive, whose morals are pure, whose censures breathe *only* the spirit of friendly admonition. Let these continue (and I hope they will) to be the principles on which agricultnral periodicals are conducted and they will not shortly be considered the least of Heaven's choicest blessings.

At this point dinner was announced—serious reflections seemed to be passing through the mind of Captain A.—nor shall the conversation be soon forgotten by

AN OBSERVER.

COAL ASHES.

In a late number of the Farmers' Register there appears an excellent article from the pen of the Rev. Jesse H. Turner, "giving his experience" in renovating poor land. The scene of Mr. Turner's operations lies within two miles of the city of Richmond, which has enabled him to make the most liberal use of manure. He found his grounds a worn out waste, and he has converted them into a beautiful and productive farm. The finest crop of oats we have seen this year has been grown on one of his fields. Mr. Turner's success only proves what industry, perseverance, and judgment may effect, even under the most discouraging circumstances.—The character of his soil was, we believe, originally of the most upromising kind, abandoned by its former proprietor as almost worthless, and prized at all, only, on account of its contiguity to the city. Much of it was a low slash of pipe clay, generally considered the most worthless of soils—yet, this has been converted into a very productive and extremely profitable meadow. At what expense this has been effected, we do not know. We presume that to improve such land, under ordinary circumstances, would, like the Indian's gun, cost more than it would come to; but Mr. Turner has availed himself of his propinquity to the sources of improvement, with, we doubt not, great judgment and profit, and the high state of improvement exhibited on his farm, puts to shame many, who, with equal opportunities and better soil, are not reaping half his crops.

Great quantities of coal are consumed in this city, and we remember when piles of coal ashes encumbered the lots of our citizens, reckoned a nuisance, to be removed only at considerable expense. Mr. Turner claims to have been the first to establish the character of this article as an improver of the soil. He first applied the coal ashes only to his white livery flats, from which, he says, he, the very next season, reaped as luxuriant a crop of grass as he ever saw grow on the rich bottoms of the upper country. Encouraged by his success, he next applied them to his light, high land with equal effect. He says:

"On a part of a field which I cultivated in corn I applied putrescent manures; on another part, lying along the side of it, I applied coal ashes. The season, especially the latter part of it, was rather a bad one for corn. About the time of earing, it was attacked with a drought from which the crop suffered severely. But I could but notice the striking difference in the two portions of the field. Where the manure was applied the blades fired, and the product was indifferent; whereas, where the ashes was put, the corn maintained a vigorous green, even to the lowest blade, and the crop was a heavy one.

"There is also another circumstance which highly recommends the coal ashes as a manure, and that is, that they are not only speedy, but *permanent* in their effects. How long they will last, and still manifest their efficacy, I cannot tell. I can point to places on my farm which were enriched by them ten years ago, and these places are rich still. Every time I plough I bring up portions of these ashes, and they appear as fresh as they were when first applied. Whether they have the faculty of fixing other manures in the soil, I cannot tell, but this I know that they have the wonderful faculty of fixing themselves. From the fact of their exceedingly slow decomposition, one would suppose that they had but little, if any efficacy. But when I see those places on which they have been deposited, closely covered with a strong turf, I must conclude that there is a powerful influence at work, though I cannot understand the mode of its operation."

The chief value of this article, however, Mr. Turner conceives to consist in its action as a top dressing on the grasses. Used in this way, he

says, it uniformly acts like a charm. He then remarks:

"There is, however, one great drawback to the value of this article, and that is its great weight. When sobbed by the rains of winter, (and most of it is in this condition,) 12 bushels is a good load for an ordinary team. Indeed my mules often suffer very much under their task of three loads per day to the distance of about three miles. Upon the whole, I am so thoroughly convinced of the enriching qualities of coal ashes, that could I find a bed of them on my farm, I should feel myself amply compensated for the want of the richest marl."

We are inclined to believe that the chief value of the article is derived from this very absorbent power of which Mr. Turner complains. Coal ashes upon analysis yield a small portion of sulphate of lime, (gypsum) charcoal, and lime; the proportions of the first and last are too small to be very active, and it is the charcoal, probably, which, by its great absorbent power, enables the ashes to hold in readiness for future use the valuable gases as they are disengaged from the decomposing manures.

We should not omit to mention, that, upon the land where the ashes were found so beneficial, heavy applications of putrescent manures had been previously made.

For the Southern Planter.

VIRGINIA REAPER.

Big Lick, Roanoke, July 13, 1842.

Messrs. Editors,—I have been surprised that the "Virginia Reaper," invented by Cyrus H. M'Cormick, of Rockbridge, has not received some notice in our agricultural papers. I am satisfied that it is one of the most important implements which has been presented to the agriculturist for many years. I understand it has been patented since 1833, but the patentee, with a most commendable patience and prudence, determined not to hazard the reputation of his invention by supplying the public demand, till he had scrutinized, tested, and perfected it by several years of private experience. After eight or nine years of careful observation, he again appears before the public, prepared to guarantee with confidence the performance of his reaper. I and others embraced the first opportunity of supplying ourselves, and have used them as far as was practicable in our late wheat harvest. So far as I have any knowledge of the opinions of those who have purchased them, or of those who have witnessed their performance, there is an unanimous concurrence in the belief that the machine is fully equal to every thing said of it in its advertisement.

I have tested it satisfactorily in every grade and condition of wheat; in that which was very light, as well as that, which would have yielded, but for the rust, from thirty to forty bushels per acre; in that which was erect and in that which was tangled and fallen, and found it to operate, in every instance, with surprising neatness and efficiency, scarcely leaving a head and but slightly influenced in the number of acres cut in a given time by the condition of the grain. It was found to cut tangled and fallen grain where ever it was not too flat to be reached by the sickle as well as that which was standing.—The neatness and completeness with which the crop is saved is scarcely conceivable to one who has not witnessed its work. Those most wedded to the cradle, admit that the reaper will save on an average at least one bushel more to the acre in standing wheat than the best cradling, whilst in tangled grain the saving would be augmented to double, treble, or even quadruple that amount. So that the machine, which costs only an hundred dollars, will pay for itself in cutting an ordinary crop.

The machine too is simple and substantial; of course, not liable to get out of order, and when from casualty deranged or broken, easily rectified or repaired by an ordinary mechanic. It will cut with facility fifteen acres per day, and when pushed, at least twenty. Two hands attend it with ease as rider and raker, relieving each other regularly, and five or six will bind the grain with more ease than they would bind the same quantity of grain after cradlers and rakers, as the machine leaves it straight and in piles large enough for several sheaves. It is fully equal to five choice cradlers, who would require five rakers and five binders to follow them, making fifteen in all. Thus, you see there is a saving of the labor of eight hands in every day's cutting of the reaper. It performs equally well on rolling and undulating as level land and by taking *steep* hills obliquely, so as to graduate the ascent, the difficulty with them will be in a great degree obviated.

I refer you to the advertisement of Mr. M'Cormick in the Enquirer of October or November, 1841, for a minute and satisfactory description of the machine, and would suggest the propriety of your appending it as a note to this letter, for the satisfaction of your readers. I will merely add, in closing this communication, the testimony of a lowland farmer, who has had three of the machines in operation this summer.

Mr. Corbin Braxton, in a transcript with which I have been provided, says, "I have had three of Mr. C. H. M'Cormick's Patent Reapers at work this harvest under my immediate observation; one on the farm on which I reside, and two others on farms under my management,

and take pleasure in stating, that the operation of all has been fully equal to my expectations; and indeed rather exceeded it, as indeed that of all others who witnessed the operation of the machine. Mr. M'Cormick's advertisement is fully sustained. It will certainly cut from fifteen to twenty acres per day, if well attended to, and leaves not a straw that can be brought in contact with the cutter. It has been worked this harvest under every disadvantage which it was possible almost to bring to bear against it, in consequence of the unprecedented weather we have had. It will cut any wheat that is not too low for the reel and teeth to reach it. It does not appear to me to be as liable to get out of order as a common cradle, and I should think it would be very durable. The Reaper has cut all descriptions of wheat, green, ripe, rusted as badly as wheat could have it, lying and standing. And I have no hesitation in saying, that I believe it one of the most important agricultural improvements of the day, and think that every farmer cutting fifty acres of wheat would find it to his advantage to have one. No weather has prevented the Reaper from working, except when the ground was so soft as to mire the wheels.

Signed, CORBIN BRAXTON.

Chericoke, June 28, 1842."

I send you this hurried letter in the hope that it will be sufficient to awaken public attention to this important invention of a native citizen and be the means of introducing speedily an implement which will promote the prosperity of agriculture and at the same time be a source of emolument to the individual to whose genius and industry we are so much indebted.

Yours, respectfully,

W. M. PEYTON.

We published a notice of this implement, at page 217 of our first volume, and shall be very happy to afford the worthy inventor any farther facility in extending a knowledge of the merits of his machine.

For the Southern Planter.

MUSQUITE GRASS.

Albemarle, July 16, 1842.

Messrs. Editors,—Since I sent you the sample of grass noticed in your July number, I have received information by a gentleman from South Carolina, a near neighbor of Col. Wade Hampton's, that the Musquite grass of Texas is in every respect similar to the grass which I cultivate. He also brought some of the seed from Mr. Hampton's. The same grass is likewise found in this county, growing on a farm formerly occupied by a son of the late James Maury, Consul at Liverpool. It now appears from the information obtained, that the Musquite grass of Texas is the same grass known in Europe as the Holcus Lanatus; but by whatever name it may be called, I esteem it a valuable grass and worthy the attention of farmers. It is not inferior to the orchard grass for grazing, and yields a better hay; it is a better grazing grass than the timothy, and equally good for hay—and preferable to the herds-grass for either hay or grazing. This grass produces seed in greater abundance than either of the above mentioned grasses, and succeeds well on lands suited to the production of either of them. I prefer seeding this grass with clover to those other grasses. It ripens two weeks before timothy, and a few days later than the orchard grass. In saving the seed I cut it above the tops of the clover with the cradle, and then cut what remains with the clover for hay.

Respectfully yours,

WILLIAM D. MERIWETHER.

Captain Meriwether has been kind enough to leave a bundle of the seed of this grass at our office for distribution.

For the Southern Planter.

DOG TRAP.

Messrs. Editors,—I have long esteemed my sheep the most convenient and profitable stock I raise, and should have greatly increased my flock but for the annoyance to which I am subjected, in common with my neighbors, from the dogs that surround us. Having heard of a trap for catching these thievish and murderous scoundrels, I have resorted to it with great success, and strongly recommend it to the consideration of my fellow-sufferers. I simply make a pen of fence rails, in an exposed situation, five or six feet high, narrowing it in towards the top like a partridge trap. A hole of two feet square is left open on the top, and the trap is baited with a quarter of unskinned lamb, or if necessary, a living animal is used as the lure to this insidious snare. The dog finds no difficulty in mounting the trap from the outside, and pouncing on his victim through the hole in the top, but when he has indulged his barbarous appetite, and desires to return, he finds the difference between a concavity and a convexity, and for the light he thus obtains in natural philosophy, he pays the forfeit of his life next morning.

My success on several occasions has induced one or two of my neighbors to resort to the same remedy, which has been equally efficient with them.

Your obedient servant,

JAMES RIVER.

SOILING.

It seems that Mr. J. Jenkins, in the neighborhood of Philadelphia, was known to have insti-

tuted some careful experiments upon the subject of soiling, and being called on by a correspondent of the "Farmers' Cabinet," he gives the following as the result of an experiment for three months on twenty-one head of cattle:

"On the whole, it convinced me that 'Vanthace' is right in stating that a piece of grass requisite for pasturing one animal, is by soiling capable of sustaining four, if economy be used in feeding. Although my cattle did not get completely fat in their stands, they appeared to me in general to be more comfortable than afterwards on pasture—always shaded from the hot suns and unannoyed by flies, fed at regular intervals to the full, just room enough between for rumination and digestion; they would testify their satisfaction by chewing the cud, lying on their full stomachs, while the sun beamed or the rains descended without, and by returning mostly from the water-trough direct to their stands without coercion or invitation. I calculated that the manure at one dollar per load paid for the labor of attendance, and as an offset against the prolongation of fattening, if indeed they could have been finished earlier on pasture alone, which the quality of the cattle and their age leads me to doubt, I mowed and put away in my barn at least fifteen tons of good hay more than could have been done had they been all the time on pasture.

"Although convinced of the superior economy of this mode of feeding, I have not ascertained whether cows will milk as well, or beef cattle feed as fast by it, as on pasture—where cattle are to be *kept* rather than *fatted hastily*, I have no doubt of its superiority. J. Jenkins.

West Whiteland, 3d mo. 25th, 1842."

MANUFACTURING MANURE.

Mr. M. G. Bommer has taken out a patent for a process by which fermentation is quickly produced in a mass of vegetable matter. A fortnight is the extent of time required to convert a pile of green vegetable matter into a heap of the very best manure. Mr. Bommer proposes to sell the right of using this process to individual farmers, and publishes several certificates to prove its efficacy. We are not informed, however, of the cost of the process, upon which, we imagine, its utility will be found to depend.

For the Southern Planter.

ROTATION OF CROPS, TOBACCO, RUST.

In the very excellent report of the Powhatan Agricultural Society upon the subject of wheat, I would just offer one reason, and that an excellent one in my opinion, why we should adopt, when practicable, the five field rotation as therein mentioned, viz: corn, oats, clover, wheat, clover, which is, that that rotation, when properly managed, will supersede the necessity of ever sowing clover seed on the same land more than once. When we take into consideration the expense of buying clover seed, when extensively used, and the trouble of sowing, &c. the above plan, in these hard times, when economy ought and must be the order of the day, should attract some attention. No doubt this consideration had its due weight in the adoption of the system, but its not being mentioned in the report, I am induced to send this little scrip on the subject. I would say that the clover fields should not be grazed except perhaps from the time of hauling in the wheat till winter, and not then, when the land is wet.

The clover should be sufficiently ripe when fallowed for wheat; and when ploughed for corn, the operation should be well performed and the crop cultivated without turning the clover up again. The succeeding spring the land should be ploughed the same depth and the oats raked in and the clover will be thick enough. The decayed vegetable matter thus brought on the surface will be an excellent top dressing for the oats and clover.

Thus much for the wheat. Now a word or two on the tobacco report, which is worthy the attentive consideration of the tobacco grower. "The first operation is the hanging upon sticks—that each plant be placed perpendicularly on them, &c." without mentioning what holds the sticks in a horizontal position. I imagine it was not deemed necessary to enter into particulars so minute. Some few planters have permitted two hands to take hold each end of the stick, and when the plant was cut it was put on by the cutter without its ever touching the ground. One might suppose that some plan of the kind was the one indicated in the report referred to. With plenty of hands and time too, the plan would then be objectionable. But as all saving of time and labor is economy, I think some other plan should be adopted, to the entire exclusion of the above, if any person should now practice it. The carrying it to the scaffolds on the shoulders of the hands is also objectionable, as the most careful hand will bruise it to some extent.

As good a plan as any, is, to let the cutter be followed, when the tobacco becomes sufficiently *wilted*, by others, with sticks in the arms of some one or two little boys, and each stick as needed, stuck into a tobacco hill at an angle of about forty-five degrees, the end in the ground always towards the sun, and the plants carefully put on; the first, next the hill, and so on, in number according to the size of the plants.

The buts pointing towards the sun, the to-

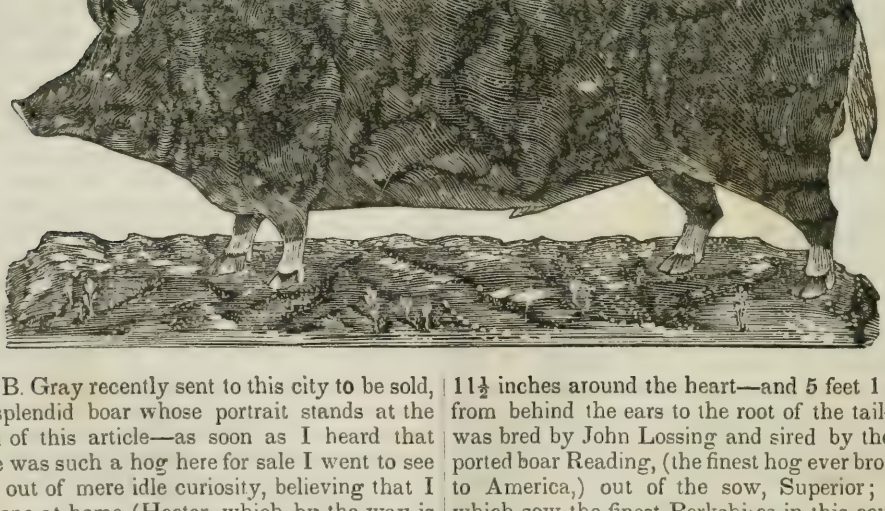
bacco will not be likely to scald. Other hands can be carrying it to the scaffold, which should be convenient. A strong laborer will carry a stick in each hand, holding them sufficiently high—or he can carry four sticks, two on each shoulder, by slipping the tobacco to each end of the stick, being a much greater quantity than could be conveniently carried if not on sticks. This may be thought by many to be a small matter, and so perhaps it is, but as "time is money" it should be expended in small matters as well as great with strict regard to economy. It is important, for the farmer particularly, to strike always at the right time and place, and never, where it can as well be avoided. If the tobacco be put in piles or heaps, and forks or other uprights, for the sticks to rest on, it would take as long to heap it as to put it on the sticks in the way, I mention which can be done with less handling, and of course a saving of labor. I just wish in my plain farmer-like style to express my preferences in the matters referred to.

I will conclude with a few observations upon the cause of rust in wheat. It is generally supposed, I believe, that warm damp weather, creating a great flow of sap causes the rust. If such weather causes more sap, the same kind of weather gives the grain greater maturative powers. I, therefore, am of opinion that unless this free and abundant *flow* of sap is *suddenly checked* by *cool* weather, we should never see rust on wheat. The cause, I believe, is, therefore, beyond our control,—but as forward wheat is less subject to it than late, we could, to some extent, avoid it by early sowing and on highly improved land, which would cause it to ripen some six or eight days earlier than that sown late and on land not so well improved.

W. W. Hancock.

Chesterfield, July 19, 1842.

CHESTERFIELD.



J. B. Gray recently sent to this city to be sold, the splendid boar whose portrait stands at the head of this article—as soon as I heard that there was such a hog here for sale I went to see him, out of mere idle curiosity, believing that I had one at home (Hector, which by the way is a *very fine* animal,) as good as the stranger, I was about to visit; but I was surprised and astonished when I saw him, to observe how infinitely superior he was to any boar of any breed I had ever seen; and determined to have him at any price—and the very lowest I could get named for him, after several days bargaining, was eighty-five dollars. Chesterfield stood, when I bought him at two years old, at the middle of the back 2 feet 9 inches high—measured 4 feet 11½ inches around the heart—and 5 feet 1 inch from behind the ears to the root of the tail—he was bred by John Lossing and sired by the imported boar Reading, (the finest hog ever brought to America,) out of the sow, Superior; from which sow the finest Berkshires in this country have sprung. He is now at my farm, near Manchester, and will be permitted to serve sows for $5—no charge for board. Reading, the sire of Chesterfield, measured, at three years old, at the middle of the back 2 feet 10½ inches, girth behind the shoulder 5 feet 2½ inches, length from behind the ears to the root of tail 5 feet 1½ inches—he was sold by J. Lossing to Mr. Beach, of Ohio, for $200 cash—and when carried to the West he served 72 sows at $10 a piece, the

first season, besides attending to 30 for his owners, and is now acknowledged to be the finest hog in all the West. I promise that at the next fair of the Henrico Agricultural Society, Chesterfield shall out measure Reading; and would take the prize from him were they side by side.

I would engage a few pair of pigs by him out of my two big sows, deliverable this fall if early application be made.

Address L. M. BURFOOT,
Southern Planter,
Richmond, Va.

For the Southern Planter.

FENCING.

Messrs. Editors,—Is there no ground for hope that the law respecting fences may be changed. The present law is exceedingly onerous. I have 650 acres of land which require about six miles of fence five feet high, although I have not half a mile of cross fencing, and I am satisfied that I could save one-fourth of the labor on my plantation beside the destruction, wear and tear of my oxen in frozen weather and the warm weather in spring, and their feed, (which the best farmers will tell you must consist in part of corn,) if I were not obliged to protect my crop against my neighbor's stock as well as my own. This, I assure you, sir, falls very heavily upon the farmer, more especially if he be a laboring man, having no negroes of his own, or if he has to hire a part or all the labor of his plantation.

I will not weary you with my awkward mode of reasoning, but leave it to you, who not only know the evils but know how to tell of them, to urge upon our legislators the necessity of a change, at least in the eastern part of Virginia.

Yours, &c. M.

We are well aware of the great desire of many of our readers for the passage of a *stock* law. Amongst the most strenuous advocates of a regulation by which every man would be compelled to keep his stock on his own premises, is our respected friend Parson Turner. Great as the advantages would be to many, there is too much open land, which affords fine summer grazing, even in Eastern Virginia, to make such a law by any means desirable to a majority. The few who suffer must, therefore, patiently bear this, as they do many other particular evils, for the sake of the common good, and resign to posterity, the advantages of a denser population.

BARLEY.

Having received no assistance from our correspondents, and being little acquainted with the subject practically, we looked up our exchange papers and standard agricultural works to enable us to comply with the request of our Loudoun correspondent. We found that the treatises in American papers were hardly more than extracts from Loudoun's Encyclopedia of Agriculture, than which, by the bye, no higher authority is known in this country or in England. We, therefore, give the following condensed summary of what we have met with, taken chiefly from the work just alluded to.

The best soil for barley is a light, rich, loam, finely pulverised. It will not grow well on very sandy or soft soils, or on stiff clays, such as are most suitable for wheat; the ground should be well pulverised by repeated ploughing and harrowing, and if preceded by turnips or peas, (but not by wheat or oats) and the ground well manured for the turnips, so much the better. Manure can seldom be given with advantage to a crop that occupies the ground so short a time as barley, and, therefore, it is generally sown on land which has been enriched for a preceding crop. It delights much in a warm and dry climate. From the middle to the last of April is the best season for sowing, much, however, depending on the state of the season; when the spring opens early and warm, the middle of April is soon enough; if the season is cold and backward, the first of May is sufficiently early. On rich land, in England, two bushels per acre is sown, and more recommended on thin land; but we would always recommend thick seeding on rich land, whilst poor land should be sown more sparingly; the practice of the best farmers in Virginia bears us out in this opinion. Brown recommends that the seeds be steeped from 18 to 24 hours in pure water, previous to sowing; allowance being made at the time of sowing for the swelling of the grain in the steep. In England, it is sometimes sown in drills, and ploughed and hoed, but we would not advise this method of cultivation in this country. The crop is ripe and ready for the cradle when the Red Roan, as the farmers term it, meaning a reddish color on the ear, is gone off, or when the ears droop and fall, as it were, double against the straw, and the stalks have lost their verdure.

In harvesting barley more care is requisite than in any grain crops, even in the best of seasons; and in wet seasons, it is found extremely difficult to save it.

Owing to the brittleness of the straw, after it

has reached a certain period, it must be cut down, as, when it is suffered to stand longer, much loss is sustained by the breaking off of the heads; on that account, it is cut at a time when the grain is soft, and the straw retains a great proportion of its natural juices, and consequently, requires a long time in the field, before either the grain is hardened, or the straw sufficiently dry; when put into the stack sooner, it is apt to heat, and much loss is sustained. The general product is from twenty to thirty bushels in England, and in some cases, as many as seventy-five bushels per acre have been obtained. The straw is of little value, being used only as litter. Smut is the only disease to which the crop seems to be liable.

For the Southern Planter.

CALIFORNIA WHEAT.

Goochland, July, 1842.

Messrs. Editors,—I have of late seen many notices of the California wheat (*Triticum Compositum*) in the Enquirer and other political papers, in all of which it is spoken of most favorably, but especially does the Editor of the Enquirer give it his commendation, speaking of it as likely to produce the greatest improvement in the state of our agriculture that has been brought about for many years. Now, gentlemen, lest these laudatory notices, so well calculated to humbug the people generally, should induce farmers to buy this wheat with a view of sowing a part of their land in it, I will, through your most valuable periodical, make public an experiment which I have recently made with this *California wheat.*

Being fond of making experiments with different kinds of grain and plants for my own benefit and amusement, I last fall procured a few heads of this wheat and sowed it in drills upon a piece of land that is quite rich; the grains sown were small, shrivelled, and indifferent, but came up well, and grew off prettily. They headed rather later than other wheat sown about the same time, and were consequently just in the way of the rust, which, however, did not injure the appearance of the straw as much as is generally the case in such a spell of weather as the wheat has this year been subjected to. The straw is short and would not be sufficiently large to sustain the weight of the head, if it were well filled, which, however, is not the case, for the grain is short, chaffy, shrivelled, and possessed of but little farinaceous matter. The result of my experiment has fully convinced me of the utter worthlessness of this wheat, in this country, whatever may be its value in a warmer and more genial climate.

That you may satisfy yourselves of the correctness of my conclusions, I will, by the first opportunity that offers, send you a few heads, splendid indeed in their external appearance, but having their inside hollow and full of emptiness. By examining them, you must with me arrive at the conclusion that it is entirely vain ever to hope for any good results from a grain so perfectly indifferent as that of the California wheat.

WHEATON.

For the Southern Planter.

Charlottesville, July 13, 1842.

Messrs. Editors,—Your June number, page 129, contains an extract from an address delivered before the Pee Dee Agricultural Society of South Carolina, showing the immense advantage of turning in green crops. It is there stated "that the land manured by turning in a crop of peas, (cow peas) yielded fifteen bushels of wheat to the acre; whilst that on which nothing but the natural growth of weeds and grass had been turned in with the seed, yielded only *one* bushel." Now, Messrs. Editors, can it be believed that a crop of peas could produce such a state of fertility as the above and more farmers not know it? especially, as many are willing to give a dollar a load for manure. I observed last year in passing through Goochland, that Mr. Sampson had a field sown down in peas, I suppose, for the purpose of turning in as manure. I should think it would be very acceptable to your readers generally if he, or any other person, could give us some information on which we could certainly calculate as where and at what price the pea can be bought, when it is sown, and how many to an acre.

I hope you will not let this subject rest until there be elicited enough to satisfy every mind that green crops are the shortest and surest way of improving our poor lands. Can any of your readers give us their experience as to the fertilizing qualities of buckwheat? I understand it is extensively used in Rockingham as a preparation for wheat.

J. FIFE.

We think with our correspondent that the subject of turning in green crops is entitled to the fullest consideration, and we shall be much pleased to see it amply discussed.

AGRICULTURAL CHEMISTRY.

Messrs. J. W. Randolph & Co. have laid upon our table a little work, entitled "A Popular Treatise on Agricultural Chemistry for the Use of the Practical Farmer." The author, Mr. Chas. Squarey, an Englishman, without pretending to any discoveries of his own, has attempted to

free, as far as possible, from technical terms the received theories of Liebig and others upon the chemical action of agricultural agents. That many of these theories, concocted by the philosopher in his closet, are destined to fall before the superior knowledge of the *practical* farmer, we do not doubt. The philosopher must exchange his laboratory for the open field, with all its varieties of chemical agents, subject to all the influences of the various revolutions of the season, before he can *with certainty* establish a system for regulating the growth of plants in the open air. Still something has been, and more will yet be effected, by the labors of mighty minds devoted to scientific pursuits, and if they have not attained all that a generous zeal in the cause to which they are devoted, induces them to flatter themselves with having obtained, they have probably arrived at many important conclusions, that the observations of practical men will hereafter confirm. At any rate, their pretensions are of such a character as to make a knowledge of their theories deeply interesting to every individual who has an opportunity of testing them; nowhere can the man without a knowledge of technical terms obtain this information so well as from the work of Mr. Squarey; and if in the endeavor to use language intelligible to all, he has been less full and explicit to the initiated, the difficulty rests rather in the nature of his task than in any want of skill in the execution. We would recommend this little work, the price of which is only seventy-five cents, to the consideration of every farmer in America.

For the Southern Planter.

BRIERS.

Messrs. Editors,—In the July number of the Southern Planter is published a letter from Wm. Massie, Esq. of Nelson county, in which he asks for information in regard to the destruction of briers. The following plan I have found to succeed: Mow and grub a field in the month of August, cultivate it in corn the next year—graze it until the succeeding summer, then fallow and sow it in wheat—after which use it as a pasture for sheep and cattle. This system if persevered in and applied to all the fields in rotation will clean and improve the land, prepare it for clover, and cause it to produce more abundant crops of grain.

As you have published much about the hog, its various species, nature and qualities, permit me to state a fact (probably not generally known) that *different breeds of hogs will not amalgamate.* I have known a sow of our common stock to have pigs by an improved boar, some of which partook of the nature of the father and others of the mother, as different in appearance and size as were the boar and sow, and none showed *a mixture of blood.* Cases of the kind I have frequently observed; such may not always be the result of crossing, yet I believe farmers should have but one sort, and that the best, which is generally admitted to be the Berkshire.

FAUQUIER.

July 18, 1842.

RURAL REPOSITORY.

We have received a beautiful little sheet with the above title, printed at Hudson, N. Y. at fifty cents per annum, with a request that we would notice and exchange—with the last we promptly and gladly complied; but we have hitherto forborne, as a general rule, any particular notice of our exchanges, although many of them were entitled to such compliment at our hands, on more accounts than one. But where it was invidious to make distinctions, where delicacy forbade our being candid, we determined to be silent. Our extracts are the best test of our estimate of the merits of our cotemporaries. This, however, we promise, when we meet with an agricultural paper, that is not worth ten times the price of subscription, we will notice it.

ASPARAGUS.

From the British Gardener's Chronicle, it appears, that this vegetable obtains a size and flavor in the north of Spain unknown to any other part of the world. The Editor asserts that there is only one variety of the plant, and that the difference in individuals is entirely owing to the difference in cultivation. In country gardens, he says, it is small, green, and strong—in the London market it is long, white, hard, and tough—to the eye attractive enough, but to the taste more like bleached timber than an esculent. Indeed, we have never been able to comprehend why, in this our age of improvement, some ingenious turner has not produced imitation sticks, which might be tipped with half an inch of eatable asparagus, and thus spare the necessity of cooking four-fifths of the stuff that is brought to a London table.

Captain Churchhill, of the Royal Marines, spent some time at Guipuscoa, particularly remarkable for the flavor of its asparagus, which measures from three to six inches in circumfer-

ence: the following he states as the mode of cultivation by which this degree of perfection is obtained:

"Asparagus is a plant found naturally on the beach of various parts of the coast of Europe, where it is covered by the drifting sand, and watered by salt water at high tides. Sand and salt water occasionally may, therefore, be regarded as indispensible conditions for maintaining it in health. How seldom is this thought of! It, however, explains in part the excellence of St. Sebastian asparagus.

"It seems that at the mouth of the Urumea is a narrow slip of land, about three feet above high-water mark, consisting of alluvial soil and the wearing away of sandstone hills, at whose foot it is placed. This is the asparagus ground of St. Sebastian. Beds are formed five feet wide, without any previous preparation except digging and raking. In March the seed is sown in two drills, about two inches deep, and eighteen inches from the alleys, thus leaving a space of two feet between the drills. The rows run invariably east and west—doubtless in order that the plants may shade the ground during the heats of summer. When the seedlings are about six inches high, they are thinned to something more than a foot apart. Water is conducted once a day among the alleys and over the beds, so as to give the seedling an abundant and constant supply of fluid during the season of their growth. This is the cultivation during the first year.

"The second year, in the month of March, the beds are covered with three or four inches of fresh night-soil from the reservoirs of the town; it remains on them during the succeeding autumn; the operation of irrigation being continued as during the first season. This excessive stimulus, and the abundant room the plants have to grow in, must necessarily make them extremely vigorous, and prepare them for the production of gigantic sprouts.

"In the third spring, the asparagus is fit to cut. Doubtless all its energies are developed by the digging in of the manure in the autumn of the second year; and when it does begin to sprout, it finds its roots in contact with a soil of inexhaustible fertility. Previously, however, to the cutting, each bed is covered in the course of March very lightly with dead leaves, to the depth of about eight inches; and the cutting does not commence till the plants peep through this covering, when it is carefully removed from the stems, in order that the finest only may be cut, which are rendered white by their leafy covering, and succulent by the excessive richness of the soil.

"In the autumn of the third year, after the first cutting, the leaves are removed, and the beds again dressed with fresh night-soil as before; and these operations are repeated year after year. In addition to this, the beds are half under salt water annually at spring tides.

"Let any one compare the mode of culture with ours, and there will be no room for wondering at the difference in the result. The Spaniards use a light sandy soil; we are content with any thing short of clay. They irrigate; we trust to our rainy climate. They know the value of salt water to a sea coast plant; we take no means to imitate nature in this respect. They dress their beds with the most powerful of all manures; we are contented with the black residuum of a cucumber frame, which is comparatively a *caput mortuum*. Finally, they throw leaves lightly over their beds, by which means they expose the young sprouts to the least amount of resistance, and force them onward by the warmth collected from the sun by such beds of leaves; we, on the other hand, compel the asparagus to struggle through solid earth, capable in the smallest possible degree of absorbing warmth during the day—but, on the other hand, ready to part with its heat again at night to the greatest possible amount.

"Can any one wonder, then, at the poor results obtained by our manner of cultivation?—or that some gardener should now and then astonish his neighbors by producing asparagus which we call giant, but which at St. Sebastian would be called second rate?"

To the market gardener asparagus is probably the most profitable vegetable he raises, and he may well afford to incur a little additional pains or expense, which will enable him to bring a superior article into the market.

POTATOES.

Potatoes require a loamy soil; one abounding in vegetable matter, and moist rather than dry. Gen. Barnum, who has raised greater crops of potatoes than perhaps any other man in the United States, attributes much of his success to his not disturbing the plants in hilling after the rootlets for the tubers begin to form; his method of performing that operation being to bring rich earth in a horse cart, the wheels of which pass between the rows, and from this dropping a shovel full upon each hill. This furnishes a bed of rich fresh earth for the tubers, and avoids all interference with the roots.

MEANS OF RENEWING POOR LANDS.

It is a well established fact, that any lot of poor land may be enriched to almost any extent by planting it from year to year with sweet potatoes and turning in the whole crop of vines every autumn. Let our planters try the experi-

ment and satisfy themselves. Select a piece of your old fields and be willing to incur the trivial expense of seed and planting. How soon can you reclaim all your old pine fields which now make such an unsightly appearance among our best plantations.—*Warren (N. C.) Reporter.*

The readers of the first volume of the Planter will remember the extraordinary fertilizing properties attributed to potato vines by Mr. Joseph Bernard; several individuals of the greatest respectability have since that time confirmed his views to the fullest extent.

The following is a good thing. Every unsaleable article of vegetable growth should be carefully collected, and made to minister to the growth of that which affords nutriment to man or beast. We should prefer using it though as a cover, first, instead of turning it in at once.

GREEN CROPS FOR TURNING DOWN.

We hear much of sowing crops for the purpose of ploughing them down while green. Did it ever occur to the minds of our farmers how many and what heavy "green crops" may be cut from their rushy bottoms, their ditches, their wood; but above all, from the margins of their rivers and creeks; and which, if buried in the bottom of their furrows, would ferment and become as valuable manure as any that could be grown for the purpose at the expense of ploughing and sowing, and which would enable them to mow these for their cattle, and thus obtain from them an addition to their cattle keep. instead of robbing them of so many acres of fodder? There is upon record an account of an experiment on growing potatoes, where it was found that a single cabbage-leaf laid on every set of the potatoes while planting, produced as large a crop as was taken from the rows dressed with stable manure. Then what would be the result of a thick covering of water-lilies, reeds, or the rushes and weeds from our boggy bottoms?

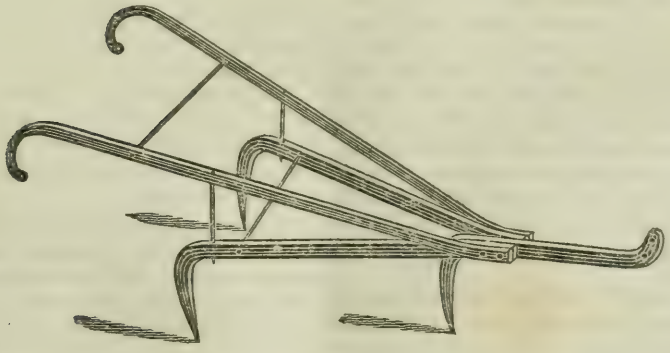
Exchange paper.

RECIPE TO CORN BEEF.

Put into a cask twelve quarts of salt, twelve gallons of water, and one pound of saltpetre: stir it until all is dissolved—salt your meat well in a separate tub, let it stand ten days, then put it in the brine with a large stone on it to keep it under. The brine will keep three or four months.

For the Southern Planter.

WROUGHT IRON RAKE.



Messrs. Editors,—Several of us in this county and the adjoining ones, have in use a three-tooth iron rake with which we are pleased. By whom invented I know not, but believe a Mr. Marshall, of Amelia, is entitled to that honor. I have used no other for nine years and am better pleased with them in 1842 than I was in 1833. I will attempt to give you an idea of them, and if I succeed, you and I together may impart the same to others. Bar iron 1¼ inches square is the size. Of this cut three pieces, each 3 feet long. The smith will then form a tooth of one end of each piece, just as common rake teeth are formed, and bend them down 14 inches long—he will raise the other end of one of the pieces a little like the beam of a wooden rake and punch the hole for the clivis. This piece constitutes the beam and front tooth. The ends of the other

two pieces he will form into the shape of a wedge, and inclining the one to the left and the other to the right, will fit them to the sides of the beam. These give you the side pieces and back teeth, and must be fastened to the beam with two screws and taps, one of which will likewise pass through and confine the lower ends of the handles. The back teeth should be 14 inches apart. The handles must be made of good timber, and will be supported by two rods of iron a half inch in diameter, fastened to the side pieces. The rake when completed weighs about fifty pounds, and is "the very best article" that I have met with for working corn and getting in small grain Its *durability* and the *difficulty of breaking it* are matters worthy of *some* consideration.

The beam and front tooth with the side pieces and back teeth are to be tapered and inclined from an inch back of the holes, the one to the right and the other to the left. The angle of inclination will be determined by the distance required between the back teeth, and may be made greater or less by a blow of the sledge hammer.

The engraving represents the entire rake, wanting nothing but a good ploughman, a good horse, rich land, and a propitious season, to make a good crop.

Your friend, PH. B. WHITE.

Nottoway, July, 1842.

From the Farmers' Cabinet.

SHOEING THE HORSE.

Mr. Editor,—The remark of your correspondent at page 318 of your number for May, "That many of us transpose the order of our labors," reminds me of a mode adopted in the shoeing of the horse, which I once witnessed, and which is, I believe, of importance sufficient to deserve notice in the pages of your valuable and very interesting work. It occurred at the town of Croydon, near London, which is known as the centre of the stag-hunt, so well attended by the whole country around, and especially by the high-bred bloods of London: and where may be seen a field of the best horses in the whole world—many of them worth their five or seven thousand dollars.

As I once passed through this town, one of my horses' shoes became loose, and I went to the shop of a smith named Lovelace, to get it fastened; the shoe was nearly new, and had become loose in consequence of the nails having drawn out of the hoof, although they had been clinched in the manner universally practised. The smith remarked that all the other shoes were loose, and would soon drop off, when I requested him to take them off and replace them; and then did I perceive the different mode which he adopted for fixing them, which I will here detail. As fast as he drove the nails, he merely bent the points down to the hoof, without, as is customary, twisting them off with the pincers; these he then *drove home*, clinching them against a heavy pair of pincers, which were not made very sharp; and after this had been very carefully done, he twisted off each nail as close as possible to the hoof; the pincers being dull, the nail would hold, so as to get a perfect *twist round* before it separated. These twists were then beaten close into the hoof and filed smooth, but not deep, or with the view to rasp off the twist of the nail. "Oh ho!" said I, "I have learnt a lesson in horse-shoeing." "Yes," said he, "and a valuable one; if I were ever to lose a single shoe in a long day's hunt, I should have to shut up my shop; my business is to shoe the horses belonging to the hunt, and the loss of a shoe would be the probable ruin of a horse worth, perhaps, a thousand pounds; but I never am fearful of such an accident." "Simply, because you drive home and clinch the nails before you twist them off," said I—"Yes," replied he, "by which I secure a *rivet*, as well as a *clinch*." The thing was as clear as the light of day, and I have several times endeavored to make our shoeing-smiths understand it, but they cannot *see* the advantage it would be to *themselves*, and guess, therefore, *it would never do in these parts;* but if my brother farmers cannot see how it works with half an eye, and have not the resolution to get it put into practice, they ought to see the shoes drop from the feet of their horses daily, as I was once accustomed to do. Now, let any one take up an old horse-shoe at at any of the smiths' shops on the road, and examine the clinch of the nails which have drawn out of the hoof, and he will soon perceive how the thing operates. In short, if the nails are driven home before twisting off, and the *rivet* formed by the *twist* be not afterwards removed by the rasp, I should be glad to be told how the shoe is to come off at all, unless by first cutting out the twist. I am, sir, a constant reader of the Cabinet, and one who has benefitted many dollars by the various hints which have been given in its pages. J. S.

Amongst which, perhaps, no one has appeared of more value to our practical readers than that here presented. Will our correspondent accept thanks for his very interesting "hint," which is given in the true spirit of reciprocity.—ED.

The readers of the first volume of the Planter will remember that the same valuable hint is given, in effect, in the communication of our correspondent H. T. as is here afforded upon the more imposing authority of the smith of the Croydon hunt, in England. The article is worthy the attention of every man who rides or drives a horse.

THE DOLLAR FARMER.

We have just received the first number of a neatly printed sheet, issued from the office of the Louisville Journal, called the DOLLAR FARMER. We have not had time to inspect the contents, but will take the responsibility of recommending it upon the faith we have in its celebrated Editor. Mr. Prentice's judgment is not inferior to his wit, and we know no information more valuable to the farmer of the South than that we have been accustomed to find under the agricultural head of the Louisville Weekly Journal.

The Farmer consists of sixteen quarto pages, and is published monthly at one dollar per annum.

BULL FOR SALE.

We have for sale a very fine young bull of the Holstein and Alderney breed. He is two and a half years old, and probably of the finest *milking* stock in America. He was bred within a few miles of the city, and is, therefore, thoroughly acclimated. The owner having no further use for him, a great bargain may be had, if early application is made (post paid) to the Editors of the Planter.

For the Southern Planter.

Having been absent from the first until the 16th of this month, your July number containing the proposal of Col. L. M. Burfoot, dated 28th April, has just come to my hands.

At this time I have no pigs, and expect none (except some litters of Berkshires in October) until March. I will then submit to the test proposed by Col. B.—a pair of Mr. Dicken's white hogs, either to be fed in the way proposed, or to be turned out upon the ordinary farm keep; at the expiration of the stipulated time, both pair to be the property of him whose pigs shall weigh most. Or, as I am not prepared for stye-feeding and have no time to attend to it, I will deliver to Col. B. himself, a pair to be fed with his own by him. I know that the experiment would be fairly and impartially made, and believe from his greater experience it would be more reliable than if made where less care, and accuracy as to the food consumed, was observed.

In these days of puffs and portraits, Col. Burfoot might well have availed himself of so fair an opportunity to say something more of his own stock of Berkshires, particularly of the very superior male lately purchased by him at a high price, and to give your readers a history of his "birth, parentage and education." This being the finest hog of any breed that I have ever seen, I think a part of your columns could not be better occupied than by a full account, with an engraving. It would be an advantage to breeders to know something of him, and for one, I should be very glad to see it.*

Respectfully yours,

WM. H. RICHARDSON.

* The above was received just as our last form was preparing for the press. Gen. Richardson will be pleased to see that his wish has been anticipated in the fine engraving of the splendid boar, CHESTERFIELD, which, at the request of several others, we have obtained for this number of the Planter.

We have had no opportunity of communicating with Col. Burfoot since the receipt of Gen. Richardson's note, but will take the responsibility of promising him an answer from our friend in our next.

C. T. B.

COMMUNICATIONS.

We have, over and over again, declared our convictions that a mine of exhaustless agricultural information lay hidden in the breasts of the farmers of Virginia. The variety of original and valuable matter furnished by correspondents in our last and present numbers, goes far to justify the assertion; all we ask is, that our friends will not relax in their exertions to render the Planter, what we know they are capable of making it, one of the most popular vehicles of practical agricultural information to be found in the Union. It must be apparent to all, that on the original communications of practical farmers the chief merit of such a work as ours must mainly depend. It cannot be expected of us, however great our zeal, however earnestly we strive to increase our practical knowledge of the art, that, unassisted and alone, we can give to our readers the best and most practical advice on all the different branches of business appertaining to the varied, and ever changing, but still delightful, profession of the husbandman. We believe there is no one who has devoted himself diligently to the practice of farming, that has not made some observation that would be new, interesting, and beneficial to thousands of others. It is the want of this free interchange of mutual observations, this facility of swapping ideas, that has so much retarded the progress of agriculture; and it was to afford an additional

facility to the South, at a cheap rate, for this mutual intercommunication, that the Planter was established. Without aid or encouragement, indeed contrary to the advice of many, we commenced this work; by dint of perseverance and industry, we have succeeded notwithstanding the obstacles of the "times," in establishing the pecuniary profits of the paper upon a footing, at least, to secure its permanency, and we have enlisted in its favor, and brought to its aid, as our readers will perceive, some of the ablest farmers and clearest writers in Virginia: but we would have every subscriber a correspondent—why not? a generous mind loves not to receive without making a return: when a subscriber sends us a dollar he pays *us* well and fairly for our labor, but it still leaves him largely indebted to those friends, who generously devote much of their time to give to others the benefit of their experience—let no man say I have nothing to tell—I cannot write—all we ask is a plain, unvarnished statement of facts—let others, in return for what they afford you, have the benefit of your observations; for any ornaments of style that you may think needful, draw upon us at pleasure; we feel fully competent to supply all that are required by the pure and simple taste of our agricultural readers. We say then to one and all, observe closely, watch narrowly, and report freely to the Planter, which has already a more extended circulation than any other agricultural paper in Virginia. To this we trust to make our paper a source of delight and amusement to its readers, and to prove to the world, that our dear old native State, calumniated as she is, stands unrivalled in the knowledge and the practice too of the noble art of agriculture.

TO CORRESPONDENTS.

We thank Dr. H., of P. G., to whom we are under more than one obligation, for his interesting communication; it will appear in our next. He must not be surprised, however, to find us exercising our ruthless and despotic power in razeeing and condensing the article, to suit the peculiar character of our work.

Various other communications have been received, which we have not yet had time to examine, but which shall be treated with attention, and for which we feel ourselves indebted to the writers, even should they prove unavailable to us.

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THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.*

Tillage and Pasturage are the two breasts of the State.—*Sully.*

C. T. BOTTS & L. M. BURFOOT, Editors.

VOL. II. RICHMOND, SEPTEMBER, 1842. No. 9.

For the Southern Planter.

FOREST TREES.

(*Continued from page* 170.)

34. Chesnut, *castanea americana*, although by no means common in this section of the country as a forest tree, is however sometimes met with in considerable quantities in some portions of our woods; it is chiefly valuable as rail timber, and is said to last longer than rails made of any other wood.

35. Chinquapin, *castanea pumila*, is a mark of poor land, and unfortunately we are too well acquainted with it in Virginia.

36. Red mulberry, *morus rubra*. There are but few large trees of this variety remaining in this part of Virginia having been nearly all destroyed in reclaiming the lowgrounds, where I presume they were once very numerous. It delights in a deep and rich soil; its great durability renders it extremely valuable for posts.

37. White mulberry, *morus alba*. Although this is not properly indigenous, yet it has become so completely naturalized that I have thought it best to mention it as one of our trees. It is to be found growing everywhere, being propagated no doubt by the birds transporting the seed from place to place. This tree is also valuable for posts, but is not so durable, I imagine, as the red mulberry.

38. The catalpa, *catalpa cordifolia*, is a fine tree, it attains a very large size, its flowers are very beautiful, and it is exceedingly valuable on account of the unparalleled durability of its wood.

39. Hagberry, *celtis crassifolia*, is a large tree; seems to prefer highlands. It is not common, and is, I believe, of no value whatever.

40. Holly, *ilex opaca*, is found on the river cliffs, and scattered through the woods. Its deep green leaves and bright scarlet berries render it quite a showy tree. It is of no value as timber.

41. Sycamore, *platanus occidentalis*, is found on the banks of the rivers and on lowgrounds that have never been reclaimed. It is the largest by far of all of our trees, and the contrast between the leaves and the white trunk and branches render it a very striking object. It is of no value as timber.

42. Black walnut, *juglans nigra*, is a very handsome tree and very valuable as timber. It is a mark of rich land. The nut of this variety is round.

43. Butternut, *juglans cinerea*, is very much like the last, and indeed they are both commonly called the black walnut. The fruit of this variety is oval.

44. White ash, *fraxinus acuminata*, is very valuable as timber for various purposes on account of its great toughness.

45. *Fraxinus sambucifolia*, black ash, is in respect to its timber entirely opposite to the white ash, the grain of this being short and coarse, and the wood, therefore, brittle and of little value for anything but fuel.

46. Red ash, *fraxinus pubescens*, derives its name from the color of its heart, which is of a reddish brown. It is not as handsome as the white ash, being much less symmetrical.

47. Swamp ash, *fraxinus juglandifolia*, is a rather dwarfish variety, and is found everywhere in the swamps. All of the varieties of the ash prefer land that is rich and alluvial, being found generally on or near the banks of rivers, and but rarely in the forest; they will, however, grow very readily on highland when transplanted. It is superior even to hickory as fuel, to say which is to say that it is the best of all fuel.

48. Red cedar, *juniperus virginiana*, grows chiefly in waste lands and in piney old fields of some thirty or forty years standing—it is always found along fence rows and sometimes in the forest. It is valuable for posts. A beautiful hedge may be made of it, but unless it is assisted by a fence it can be penetrated by hogs, as the twigs about the bottom of the bushes will die before they attain any size, and are never replaced. It requires frequent trimming to render it thick and to prevent it from assuming too much the form of a tree. When left to itself the cedar attains a considerable size. I think that this is the only distinct species of the cedar that we possess; there is, however, certainly a considerable difference of appearance between some of these trees; for the branches and twigs of some are much more delicate and inclined to droop than those of others, which are stiff and erect.

49. Birch, *berchemia*, is found on the banks of rivers and on low, moist spots; it is remarkable for its singular and numerous coats of bark which may be pulled off readily one after another. Its long and slender branches afford the

best switches in the world, and they were formerly very much esteemed by schoolmasters, but now unfortunately for the rising generation, they have fallen almost entirely into disuse. It is of very little value as timber.

50. Persimmon, *diospyros virginiana*, is utterly useless.

51. Sassafras, *laurus sassafras*, is very common, and is an exceeding great nuisance to the farmer, it being impossible to eradicate it.

52. Black gum, *rhamnus volubilis*, is found on swampy ground in the forest and is of very little value.

53. Prickly ash, *Xanthoxylum fraxinium*, grows on low, marshy lands, and is of no value.

54. Spice wood, *laurus benzoin*, grows as a shrub in the swamps. It is quite gay with its rows of yellow flowers in the spring.

55. Sumach, *rhus*. There are several varieties of this plant, but I know them only by the collective name. The berries are useful in dying.

56. Poison sumach. Thunder wood. *Rhus vernix*, is very common in and about swamps. It should be most carefully avoided as to the touch—it is the most severe poison, by far the worst of any of our plants. It may readily be distinguished from the sumach by the whiteness of it's bark and of the leaf stems. Berries are white.

57. Red bud or judas tree, *cercis canadensis*, grows quite abundantly on the unreclaimed low-grounds of creeks and rivers, but is rarely found on high land. It is a tree of no great size but of great beauty both in leaf and bloom. It will succeed well when transplanted, and is very ornamental when in flower.

58. Lime tree, *tilia glabra*, is not a very common tree, but is often met with on the banks of the river. It is large and beautiful and very much like the linden.

59. Honey locust, *gleditrchia triacanthos*, is a large and handsome tree, but not very common, and of no value, I believe.

60. Swamp laurel, *magnolia glauca*, is very common in our swamps, and its large white flowers possess the most delightful fragrance.

61. Sheep laurel or sheep ivy, *kalmia angustifolia*, is common on any cliff about the river or in the forest. This plant bears branches of the most beautiful flowers; it is said to be injurious if eaten by sheep.

62. Dogwood tree, *cornus florida*, is universal through the forest; it is very showy in the spring with its white flowers. It is useful when a small piece of hard timber is wanted, for instance, for whirls, rounds, &c. &c.

63. Fringe tree, *chionanthus virginicus*, grows in the swamps very abundantly. It is a most beautiful object with its deep green leaves and superb clusters of white fringe-like flowers hang profusely about it.

Respectfully, X.

Note to 52.—I am not sure that I should not have called the black gum, *nyssa aquatica*, rather than *rhamnus volubilis*.

TOBACCO.

In pursuance of a resolution of the House of Representatives, the Secretary of the Treasury has transmitted to Congress an interesting document, containing all the information he could obtain on the cultivation, manufacture, and consumption, of tobacco in the United States and other countries.

Although much of these statistics is vague and uncertain, from the want of data, yet the subject is of such consequence as to impart interest even to the rude guesses that are attempted from what could be ascertained. A great deal of the information afforded is perfectly familiar to every Virginia reader, but the following estimates, of the correctness of which we are unable to form an opinion, are somewhat novel and curious:

"It has been stated that the annual consumption now amounts to upwards of one hundred millions of pounds—giving seven pounds to every man, woman, and child. The sum annually paid by the consumers of this quantity of tobacco, in its manufactured state, has been computed, by a writer in the 'Portsmouth Journal,' at $20,000,000." Dr. Mussey, in his "Essay on the Influence of Tobacco on Life and Health," says, "Eighty thousand dollars worth of cigars, according to estimate, were consumed in the city of New York in 1810; at that rate, the present annual consumption would amount to more than $200,000."

"The Rev. O. Fowler, from considerable attention to the statistics of tobacco consumption in the United States, estimates the annual cost at $10,000,00; time lost by the use of it at $12,000,000; pauper tax which it occasions at $3,000,000.

"This estimate I believe to be considerably below the truth; it has been estimated that the consumption of tobacco in this country is *eight times* as great as in France, and three times as great as in England, in proportion to the population.

"According to the Editor of the 'New York Commercial Advertiser,' 100,000 persons in the city (about one-third of the whole population) are supposed to be smokers, and the average cost to each smoker is computed to be 10 cents

a day; total daily, $10,000, and the annual cost $3,650,000."—*American Almanac.*

"In 1834, the consumption of tobacco in value was estimated by Mr. Hunt (Editor of 'Hunt's Merchant's Magazine') at $16,000,000, of which $9,000,000 were supposed to have been for smoking Spanish cigars, $6,500,000 for smoking American tobacco and chewing, (equal to the value of the annual export,) and $500,000 for snuff. In 1838 the consumption of tobacco had increased to 100,000,000 of pounds, valued at $20,000,000 cost to the consumers." It is to be regretted that no data is given on which the above estimate is made. Mr. Lyford estimates the consumption at one-fourth of the quantity grown in the United States."

It would appear that the production is greatly on the increase in the United States, especially in the new States in the South and West, but so far, experience has shown, that for the prime article for manufacturing chewing tobacco, the region is limited to Eastern Virginia and a small part of North Carolina. Upon the subject of retaliatory duties, by which it has been proposed to force a reduction of the heavy duties imposed on tobacco by some of the governments of Europe, various letters of inquiry were addressed by Mr. Hubbard, of the House, to some of the most distinguished tobacco dealers in Virginia; amongst these we note Messrs. JAMES GRAY, JOHN CASKIE, and RICHARD ANDERSON, of the city of Richmond; Messrs. T. LYLE and W. E. VENABLE, of Farmville; Professor DEW, of William & Mary; Messrs. MORDECAI, BRANCH, and others, of Petersburg; and Mr. J. M. WARWICK, of Lynchburg. The replies of these gentlemen, who upon this subject are probably as well informed as any others in the Union, are published in this document. They unanimously, and unequivocally, deprecate any such action as was proposed by the tobacco convention held in Washington last winter, for these plain and simple reasons. The governments of France and England, against whom this contemplated action has been chiefly directed, are so dependant upon the immense revenue derived from the high duties imposed upon tobacco, that they absolutely forbid its cultivation within their territories. This circumstance gives to the American product the monopoly of their markets; but if the duty was so reduced as to cause them to look to other sources for revenue, the prohibition would in all probability be removed, and we would find competitors in the cheaper agricultural labor of both countries, many portions of whose climate and soil it is well known are adapted to the growth of tobacco. Moreover, a reduction of duty is to be particularly apprehended by the American manufacturer; the consequence of which would be, that for other European markets, he would be brought into competition with the cheaper labor of the English manufacturer, who, by the present rate of duties, is confined to his home market, from which we are entirely excluded. The circular of Mr. DODGE, noticed in our number, is hinted at by more than one of the writers as an extravagant humbug. This was pretty much our own opinion from the first. We would advise those interested in the subject to procure this document, which they will find well worthy of perusal.

For the Southern Planter.

AGRICULTURAL REPORT.

Messrs. Editors,—At the particular instance of several friends of agriculture, I have attempted to reply, to some of the queries of the Board of Agriculture, for the State of Virginia, so far as the county of Prince George is concerned. If you consider the answer as possessing any interest, you are permitted to use it in any way that is calculated to advance the interest of agriculture. There is a great deal of simplicity in some of the answers, but it must be attributed to the nature of the queries.

ROBERT HARRISON.

Description.—Prince George County is situated on James and Appomattox rivers, and lies contiguous to Dinwiddie on the west, Sussex on the south, and Surry on the east. It is intersected by several streams that run generally a south-east direction. These streams are denominated Otter Dam, Blackwater, Second Swamp, Warwick, Joseph and Joneshole—the two last mentioned empty into Nottoway river, and the others terminate in Blackwater. The land lying immediately on these streams is light, and some of it produces good crops of corn and oats, but it is not so well adapted to the culture of wheat. The land intermediate from Blackwater and Otter Dam and the river is generally stiff, and naturally unproductive, except the bottom land.

Climate.—The climate is generally healthy, and the atmosphere salubrious, but from the decay of vegetable matter in the fall, marsh miasma is generated, and autumnal fevers peculiar to a southern climate are the consequences.

Surface.—Its surface is generally level, or even, considered as a whole; but that portion contiguous to the rivers, is agreeably diversified with hills, plains and valleys.

Minerals.—Its mineral sources are not abundant, but she contains within her bowels abundant materials for the renovation and improvement of her impoverished soil. Prince George has been remarkable for the poverty of her soil and the scantiness of her production, except the part lying immediately adjacent to the rivers; even this latter part, a few years back yielding but a scanty allowance to the hardy exertion of the agriculturist. This sterility was produced by a skinning process of cultivation, and land naturally fertile was successively cultivated, until it would barely remunerate the expenses of its culture. Under this deplorable state of things, calcareous manures were discovered, applied, and demonstrated to be, an enricher of the soil We are informed, the first application of calcareous manures was made by Mr. James Cocke, of Bonaccord, and may be dated some time anterior to thier general application; this first effort was very partial and its effect barely noticed, or remembered by some of the oldest members of the Bonaccord family. This is recorded merely as an incident of agricultural history, which deserves to be chronicled, for the benefit of posterity. What appears "passing strange" is, that after its use was begun, it should have been discontinued, and the circumstance barely remembered; but we are informed an overquantity was applied which produced injury, instead of benefit.

About the year 1816 the general or extended use of calcareous manures was commenced and successfully applied on the Coggins farm by Mr. Edmund Ruffin, of Prince George; and to him we are principally indebted for all the advantages arising from its introduction and application. The merit of raising from obscurity what had become dark, or reviving what had become obsolete is equal to that of original discovery.

These manures are familiarly denominated marls and the places of their deposite marl beds, which abound on James River, from a point a little below the confluence of James and Appomattox rivers to Powel's creek, yet it may be found in different parts of the county, but more particularly confined to the streams above specified, and the marl varies in quantity, quality, color and superincumbent earth. The inhabitants generally possessing this valuable enricher of the soil, have used it to considerable extent, and it is the current opinion, that the region of country, which has been subjected to the application has increased generally in value one hundred per cent, while individual instances far exceed this estimate. The production of the soil is considered to be generally doubled, and in some instances quadrupled. Corn, wheat and clover, grow now luxuriantly upon soils which a few years ago were poor indeed. Fields of clover may be now more frequently seen than acres, previous to the use of calcareous manures, and this astonishing and delightful fact is made apparent to the most incredulous observer, that a crop of clover is sure to follow and succeed after a dressing of from two to three hundred bushels of marl, provided the land is seeded with good seed, and at a proper time. The instances of disappointment are so rare, as to constitute scarcely, an exception to the general rule. The growth of clover may be increased in quantity by other manures, by plaster and gypseous earths. This latter substance frequently abounds in the same bed, with the marl, and is supposed to possess the properties of sulphate of lime; but other properties may be superadded. It has generally a greenish cast, and is also of a saponaceous character; consisting of innumerable shining particles, and it forms most frequently the sub-stratum of these beds. By the application of this earth to clover in the proportion of forty bushels to the acre, the most decided beneficial effects have been discovered, enough to satisfy the most sceptical that it is an improver. Its effects are considered to be equal to the plaster of paris. The possession of these powerful agents and other auxiliaries, lying contiguous to a large navigable river, by which our produce may be carried abroad to foreign markets, entitle Prince George to be described as possessing advantages, and a locality far beyond counties in the interior; and it only requires industry and frugality, to render her hardy yeomanry not only to be abundantly supplied with all the necessaries of life, but also with its delicacies and luxuries. And the marl region of Virginia will finally constitute, in our opinion, a delightful and desired district of country.

Water.—The water is generally good and abundant; wells and springs abound to considerable extent; and there is no part of the county but what is well supplied. Besides the streams before mentioned, there are Ward's, Flour de Hundred, Powel's, Bicuses, Jinny's and Bailey's creeks, which are tributary streams to James River, or branches of it.

Land.—The greater portion of open land is devoted to tillage, and but little to pasturage, and the latter is generally the most inferior. In the marl region the open land predominates and there is a scarcity of wood, rail timber, and building timber, but in other sections there is an abundance of wood and rail timber, and considerable proportion in its native forest growth, that has never yielded either to the plough or axe; and there is yet a considerable proportion of land that must not be overlooked in our estimate, called "piney old field," a term sufficiently significant to every Virginian: this kind of land far exceeds in quantity, the land standing in its natural growth.

Size of Farms.—The size of the farms may be properly described as being of a medium character, and the greater number of their owners comfortably situated.

Rotation of Crops.—The rotation of crops in lands, that have received an application of calcareous manures, consists first of corn, then wheat, followed by clover,—and the farms are consequently divided into three shifts; and this may be described as the most frequent rotation; yet many may be found who pursue the four field system. In the section of the county which has not been marled, the process of rotation is corn, oats, sometimes rest, but most frequently pasturage.

Corn.—The average product per acre in that section of the county that has received an application of calcareous manures, we consider equal to four barrels, and the remaining portion of the county is considered not to exceed two barrels per acre. And we believe it more frequently falls below, than exceeds this estimate.

Wheat.—The average product per acre in the marled district of our county, will amount to ten bushels per acre, while on the contrary the part unmarled will not more than amount to five bushels. Indeed in this latter section, the land is considered to be so poor and light as to be rarely sown. The grain crop in this section is principally oats, and generally follows corn. The oat crop is considered to be hardier, safer, and from our proximity to Petersburg, to be a much more profitable upon our light and gray soils, than wheat. But at the same time, the opinion generally prevails, that oats exhaust land more rapidly than wheat, that there succeeds them less vegetation, they are more rapid in their growth, and the land is more exposed after they are cut to the rays of the sun.

Rye is occasionally sown, sometimes as an improver, at other times for the benefit of its grain and straw. Our very light and sandy lands will yield more profit in this grain, than in wheat or oats.

The march of improvement in agriculture, though slow in its advancement, has been progressive as is manifested by the greater care of stock and attention to providing suitable articles of food for them. The cultivation of the root crops is of modern date, when we consider them as field crops proper, potatoes, carrots, mangel wurtzel, sugar beets and turnips form important articles towards providing for the wants of many of our domestic animals.

Prices of Crops.—The value of the wheat depends upon the quantity made and the demand both at home and abroad—but the price per bushel varies from one dollar to one dollar and ten cents; and corn varies from forty to eighty cents per bushel; and the average price of oats may be set at forty cents.

Fencing—The fences are made mostly of rails, and run generally a zigzag course, known familiarly with us as the Virginia worm fence.

Grass.—The grasses have been successively tried, but none have succeeded so well in our hands as the red clover. We have cultivated herdsgrass, lucerne, orchard grass and timothy, and so far as our limited experience would enable us to form an opinion we would not recommend their culture as field crops; they have not proven in our hands sources of profit. We do not wish, however, to deter others from experiments, nor declare their culture will be unprofitable, but merely mention the result of our experience.

There are several varieties of hogs introduced among us which have their respective advocates. The Berkshires are the favorites of some, who contend they stand unrivalled for symmetry and beauty of form, aptitude to fatten, and of obtaining their growth at an early age; that they are superior to any hog for the stye and clover field, that they are a prolific stock, quick in action, and that they make better bacon than any other variety. Their opponents contend they are one of the humbugs of the age, of which the present generation is so fruitful; that they are very subject to disease; that they are very delicate, and cannot stand the sevrities of the winter, and contend the large white hog is best, with large pendulous ears, introduced into Prince George by Capt. Gary from near Liverpool; but on the other hand it is said they are very subject to mange, which impedes their growth; that they are not fit to be kept in the winter. Others contend for the no bone; others again, condemn all breeds but the "razor backs"—they can best stand the short keep, and that there is more in the corn crib than there is in the variety.

Woods and Waste Lands.—The woods and waste lands are appropriated chiefly to the grazing of our cattle, and afford also the range for our hogs. Some years our hogs in some sections become almost fat from the quantity of acorns, and they also fare well on the marshes of creeks; but whether this is the best mode of raising them remains yet to be ascertained; for it is agreed, that generally when they are put up they are so miserably poor that the food and trouble more than equals their value, particularly during the low price of pork—and so long as our corn commands a good price and pork is low, it would be considered good economy not to raise it.

Our cattle consist principally of the native breed, yet two Durham bulls have been introduced into our county, and our stock has been much improved in public estimation. The half breed has been demonstrated to be both good milkers and good oxen, with more size and greater strength and full capacity to endure, so far as the trial with them has been made.

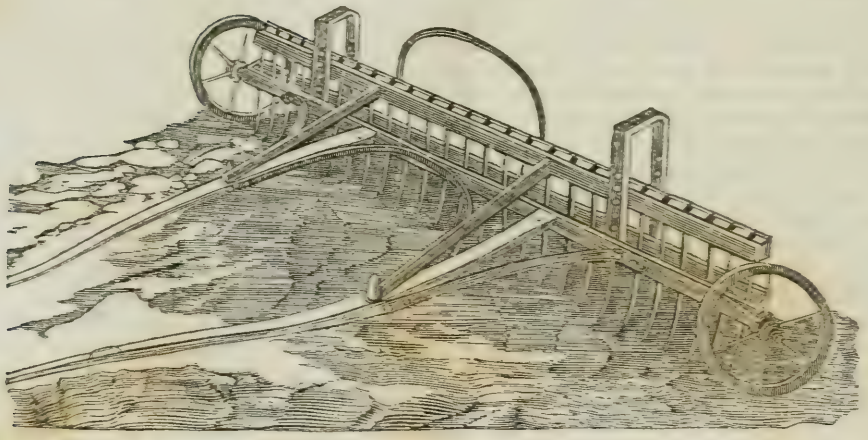
The Dairy.—The great requisite in this department is neatness. The buckets, pails, bowls, strainers, should all bear the marks of the careful supervision of the housewife. The appearance of a plate of butter is a pretty fair index

of the character of the female that prepares it. The butter in the marled district of the county is a source not only of pleasure but of profit; it is considered to be better, sweeter, richer, and has almost a golden aspect when compared with the inferior article made in the adjoining district.

THE WHITE ASH.

This tree, which is not uncommon in our forests, and which is not surpassed as an ornament for our yards, is endowed with several virtues at the north. The leaves, wood, or bark, are supposed to afford an effectual antidote to the bite of a serpent; indeed, it is said to be so obnoxious to those reptiles, that a single log will secure a wood-pile from their presence. The application of the bruised leaf, it is said, affords instantaneous relief to the sting of the musquito, bee, &c. We would recommend a trial of its powers to our unfortunate friends of the low country at this season.

HORSE DRAG RAKE.



In our last we gave a cut of the revolving rake recommended by Mr. Fontaine, and so highly esteemed at the North; we now present our readers with an engraving of a rake for the same purpose, upon, what we conceive to be, a cheaper and simpler principle. This rake, like the other, is carried forward by a horse between the shafts, and when the teeth are full, they are cleaned simply by lifting the rake at the handle, when the tines will come up together between the bars of the fixed frame, and leave the hay raked up neatly in the field. We copy this engraving from the advertising sheet of an English almanac, which is filled with representations of agricultural implements, and for which we are indebted to the kindness of a friend just from London. We shall probably resort to it again, if for no other purpose, only to give our readers an idea of the complication and prices that the English agriculturist is willing to put up with in his implements, for the sake of furthering his art.

For the Southern Planter.

MAY WHEAT.

Messrs. Editors,—Mr. Barbour wishes to be informed why the May wheat is preferred on the low lands of James River.

The principal reason is, that there is but little to be apprehended from rust, which has been so destructive of late years to the wheat crop. From 1826 to 1834 I cultivated the white May wheat, and did not fail during that time to make good crops: the last year, 1834, the smut made its appearance, and not being able to procure seed elsewhere I discontinued its culture: since then until the last year I have sowed late wheat, and every crop with the exception of one has been injured more or less by rust, and several years almost entirely destroyed.

The last year I sowed a part of my crop with May wheat and the residue with late wheat, (red shuck.) The May wheat is of the finest quality, whereas the part of the red shuck which was sowed in September is also good; but the part sowed in October is very much injured by rust.

An opinion prevails, that May wheat is not as prolific as later kinds, but this opinion, I think, is erroneous, and believe its yield is as great as any other; and when sowed as late as the 10th of October, agreeably to my experience, there is but little danger to be apprehended, of injury by frosts.

Hoping the above information will be satisfactory,

I remain, yours truly, M.

Buckingham, July 20, 1842.

From the Maine Farmer.

A PREVENTIVE OF THE WEEVIL IN WHEAT.

Mr. Holmes,—Great loss has been sustained in this section of the State for several years by the weevil. A remedy has been found—first suggested, I believe, by our *curious and useful* friend, Dr. Leach, of Sangerville. The remedy is no less than this. Sow spring rye with the wheat. I sowed a square lot of six acres to wheat last spring, and then to test this preventive, I sowed the borders of the field, two rods in width, with twelve quarts of rye. The result was, the weevils were depositnd in the rye in such numbers as to produce a famine in nearly every head. There were no weevils in the wheat, and I think there was not a quart of rye grown in a hundred bushels of the wheat. My neighbors were apprised of my design of sowing the rye, but they were wanting in the faith, and their grain sown at the same time suffered very materially. CALVIN CHAMBERLAIN.

PRINCIPLES OF FEEDING.

Stewart in his "Stable Economy" says,

"*Slow work aids digestion*, empties the bowels, and sharpens the appetite: hence it happens that on Sunday night and Monday morning there are more cases of cholic and founder than during any other part of the week. Horses that never want an appetite ought not to have an unlimited allowance of hay on Sunday; they have time to eat a great deal more than they need, and the torpid state of the stomach and bowels produced by a day of idleness renders an additional quantity very dangerous.

"By slow work I mean that which is performed at a walk, not that which hurries the breathing, or produces copious perspiration.—The moderate exertion of which I speak does not, as some might suppose, interfere with the digestive process. It is attended with some waste; there is some expenditure of nutriment, and that seems to excite activity in the digestive apparatus for the purpose of replacing the loss. Farm and cart-horses are fed immediately before commencing their labor, and the appetite with which they return shows that the stomach is not full; but

"*During Fast Work, digestion is suspended.*—Of this we have not indeed any positive proof, but there is good reason for believing it. In the general commotion excited by violent exertion, the stomach can hardly be in a favorable condition for performing its duty.

"*The Effects of Fast Work on a Full Stomach* are well enough known among experienced horsemen. The horse becomes sick, dull, breathless. He is unwilling, or unfit to proceed at his usual pace; and if urged onward, he quickly shows all the symptoms of over-work, to which I allude among the accidents of work. The effects are not always the same. Sometimes the horse is simply over-worked, distressed by work that should not produce any distress.—Some take colic, some are foundered, some broken-winded. The most frequent result is overworking in combination with colic. Perhaps the colic, that is the fermentation of the food, begins before the horse is distressed; but whether or not, his distress is always much aggravated by the colic.

"These effects are not entirely produced by indigestion. The difficulty of breathing may be ascribed to mere fulness of the stomach.—Pressing upon the diaphragm, and encroaching upon the lungs, it prevents a full respiration; and its weight, though not, perhaps, exceeding eight or nine pounds, must have considerable influence upon a horse that has to run at full speed, and even upon one who has to go so far, though not fast.

"Some horses commence purging on the road, if fed directly before starting. They seem to get rid of the food entirely or partly; for these, which are light-bellied horses, do not suffer so much, nor so often, from any of the evils connected with a full stomach. The purgation, however, often continues too long, and is rapidly followed by great exhaustion. They should be kept short of water in working days, and they should have a large allowance of beans.

"All work, then, which materially hurries the breathing, ought to be performed with an empty stomach, or at least without a full stomach. Coaching-horses are usually fed from one to two hours before starting, and hay is withheld after the corn is eaten. Hunters are fed early in the morning, and I believe racers sometimes receive no food on running days till the work be over. Abstinence, however, must not be carried on so far as to induce exhaustion before the work commences.

"*After Fast Work* is concluded, it is a little while ere the stomach is in a condition to digest the food. Until thirst has been allayed, and the system calmed, there is seldom any appetite. If the horse have fasted long, or be tempted by an article of which he is very fond, he may be induced to eat. But it is not right to let him; a little does him no good, and a full feed does him harm. The stomach partaking of the general excitement, is not prepared to receive the food. Fermentation takes place, and the horse's life is endangered; or the food lies in the stomach unchanged, and produces founder.

"Food, then, is not to be given after work till the horse be cool, his breathing tranquil, and his pulse reduced to its natural standard. By the time he is dressed and watered, he is generally ready for feeding.

"*Salt and Spices aid digestion.* On a journey, or after a severe day, horses often refuse their food. When fatigued or tired of his feed, a handful of salt may be thrown among the horse's corn. That will often induce him to eat it, and it will assist digestion, or at least render fermentation less likely to occur. Some, however, will not eat with this inducement. Such may have a cordial ball, which in general produces an appetite in ten minutes. I am speaking of cases in which the horse has become cool, and those in which the work has not fevered him. The horse should always be cool before food is offered; and if his eye be red, and pulse quick, cordials, salt, and the ordinary food are all forbidden. The horse is fevered."

New York Spirit of the Times.

For the Southern Planter.

In the last number of the Planter an Inquirer requests me to state, whether "sheep will not neglect to browse the sassafras" when a field is thickly set with clover? The field on which I destroyed the sassafras had no clover on it, when the experiment was made, but was thickly set with sassafras bushes. I had the large bushes cut down and the small grubbed up, and kept the sheep grazing on the land, during the spring and summer of that and the succeeding year; and the land was closely grazed. Since then no sassafras bushes have made their appearance, and twelve or more years have elapsed since it was done. I suppose the clover would first be eaten by the sheep, therefore, to succeed in destroying the sassafras, it will be necessary to graze the field closely. SKRINECSKY.

Buckingham, July 22, 1842.

FIRE AND WATER-PROOF CEMENT.

To half a pint of milk put an equal quantity of vinegar, in order to curdle it; then separate the curd from the whey, and mix the whey with four or five eggs, beating the whole well together. When it is well mixed, add a little quick-lime through a sieve, until it has acquired the consistence of a thick paste. With this cement, broken vessels and cracks of all kinds may be mended. It dries quickly, and resists the action of water, as well as a considerable degree of fire.—*Mechanic's Own Book.*

CHARCOAL.

This substance is attracting great attention as a fertilizer, and we make the following extracts from a paper published in the Transactions of the New York State Agricultural Society, by Mr. J. H. Hepburn:

"In the neighborhood in which I live there are a great many hearths of coal pits, as they are called; places where wood has been piled, and burned into charcoal, scattered about the country. I have invariably observed, that upon these hearths, in the course of a few years, a luxurious coat of grass made its appearance, when all around in the vicinity scarcely a blade of grass could be found, and what there was found out of the coal hearth was sickly and dwarfish. This was so well known that in the heat of summer, when the pasture in other places was dried and withered by the summer drought, it was a common practice to drive the cattle to the 'coalings,' as they are called, sure that they would there obtain food. During the last autumn, business called me into Hartford county, in Maryland. While there, I was surprised at the exceedingly luxuriant growth of a crop of grain but lately seeded into a field, on Deer creek, and also at the very peculiar appearance of the soil. The soil upon which the grain was growing had a remarkably dark appearance, and appeared to be so mellow and friable as nearly to bury the foot at every step, and although it lay very level did not appear to the touch to be so; not as the soil in the other fields around it on the same level. My attention was excited by what I saw, and I inquired if the field had not been covered with charcoal, and was told that it had been. I inquired when it was done, and was told it had been spread upon it more than *twenty years* ago!! I then asked what was the general quality of the crops raised upon it, and I was told that they were invariably fine, both as to quantity and quality. The person who lived upon the property informed me that he had repeatedly hauled the soil from that field and spread it upon the surrounding fields, and he could, for years, or in fact from the time he spread it there to the present day, always see, by the growth upon these places, exactly where he had put it!!

I had for some time past had my attention

directed to the subject but here I found it fully developed to my full satisfaction.

"When I returned home, I made it the subject of conversation frequently with the farmers in our neighborhood, and from one of them I learned that when he lived in Chester county, Pennsylvania, with his father, a part of their farm became worn out and unproductive. It was abandoned for several years, and in the mean time many coal pits had been formed upon several of the old fields, by drawing the wood there to burn into coal, that had been cut in the adjoining timber lands. After some time they again put those fields under tillage, and he states that wherever a coal hearth had been left, there the crop of grain and the growth of grass was equal, if not superior, to that which grew upon any of their most productive fields. Another case of the application of charcoal I have found in this neighborhood was made by a gentleman in the iron business to his meadow, near the coal house. He had a large quantity of the coal that had become too fine to be used in the furnace; he did not know exactly what to do with it, it was in the way, and he concluded, as the easiest way to dispose of it, to haul it out and spread it upon the grass land. He spread it late in the fall, and for many years he informed me he observed the most astonishing effect produced upon his yield of grass. The quantity was nearly double, and the effect continued as long as he owned the property, which was at least ten years; so he informs me.

"From what I can see of its effect, where a large quantity is left upon the ground, as for instance, in the centre of the hearth, it takes a considerable time for it to acquire a sufficient degree of moisture to penetrate to the bottom, and until it has acquired that degree of moisture nothing will grow there. Around the outer edges of circle where it is thrown upon the ground it is soon saturated with moisture, and vegetation is soon facilitated, and goes on rapidly. I should judge, from this, that when about to be applied to land the coal should be ground fine, and then thoroughly wetted and sown or spread with a lime spreader over the surface of the soil. From the circumstance of its being easily powdered or mashed up, I should suppose that the process would be very easily effected by making a floor of plank, say circular, and procuring a good sized stone, to be affixed by a shaft to an upright post, throw the coal into the circular planked way, and attach a horse to the shaft passing through the stone, and drive him round, carrying the stone, in its passage, over the coals. A very simple and easy process, precisely similar to the old fashioned way of grinding or breaking up bark, practiced by the tanners, previous to the invention of the cast iron mill now in use. The cost of covering an acre would be trifling, and if it produced no other effect than that of forming a permanent vegetable basis in the soil, for lime to act upon, it appears to me it would well repay a greater amount of labor and expense than would be necessary to try it.

"I have just been made acquainted with another result of the application of charcoal to arable land, that if general, from its application, will induce its use by every one who can procure it at a reasonable price: that is, wherever charcoal has been applied *rust never affects the growing crop of wheat!!* My friend who has communicated this fact to me states, that he has observed it particularly, and when the field generally has been 'struck with rust,' as it is called, those places where he had applied the charcoal *invariably escaped.* J. H. Hepburn.

Jersey Shore, Lycoming Co., Pa."

Charcoal is supposed to influence vegetation in two ways. By its combination with oxygen it may afford carbonic acid gas, furnishing the supply of carbon for plants. For this purpose, it is probable, that the more minutely it is subdivided, the better. But the property for which it has been chiefly valued in agriculture, is its extraordinary power of absorption. Pure, fresh burnt, charcoal possesses the power of absorbing ninety times its volume of ammoniacal gas, and thirty-five times its volume of carbonic acid gas. This power of absorption is much diminished by reducing it to powder; it should, therefore, when used for agricultural purposes be just broken so as to allow of its equal distribution over the surface of the soil. Its power of absorption is pretty much in proportion to the density of the wood from which it is made.

Nothing in nature is more immutable than charcoal. Its action, as we have described it, is merely that of a mechanical holder or receiver of the gases with which it may be brought in contact, and which would otherwise be dissipated. Upon the falling of the first rain, they are filtered out for the use of vegetables, and the charcoal remains unaltered, prepared to renew its kindly offices for ages.

PULVERIZING THE SOIL.

To demonstrate that dews moisten the land when fine, dig a hole in the hard dry ground, in the driest weather, as deep as the plough ought to reach; beat the earth very fine, and fill the hole therewith; and after a few nights' dews, you will find this fine earth become moist at the bottom, and the hard ground all round will become dry. Till a field in lands: make one land very fine by frequent deep ploughing, and let

another be rough by insufficient tillage alternately; then plough the whole field crosswise in the driest weather, which has continued long, and you will perceive, by the color of the earth, that every fine land will be turned up moist, but every rough land will be dry as powder from top to bottom. In the driest weather, good hoeing procures moisture to roots; though the ignorant and incurious fancy it lets in the drought, and, therefore, are afraid to hoe their plants at such times.

AGRICULTURAL IMPLEMENTS.

We fully concur with the Editor of the "Agriculturist" in the following views. Indeed we undertook last year to demonstrate that the folly of the farmer in carrying too far the principle of "buying cheap," would deprive him of the opportunity of purchasing good implements. We think now, as we said then, that the difficulty arises from the fact that he is seldom sufficiently skilled in mechanical products to distinguish a good from an indifferent piece of work, consequently, he has not confidence enough in his own judgment to induce him to pay a good price, for which only good work can possibly be afforded; for, as every body ought to know, a good article can only be made by good workmen out of good materials, which always have, and always will, command a good price. And considering the rough and unworkmanlike usage to which it is subjected, there is no department of art in which a tool requires to be better made than in agriculture.

"There seems to be a *fashion* among the manufacturers of farmers' implements, that varies from time to time, not simply in the form and style of the article, but in the quality and durability also. These changes occur to such an extent, as sometimes seriously to incommode the farmer. And it is observable not only in the more complicated instruments whose character for utility is not fully established or generally acknowledged, as in some of the mowing and threshing machines, but with those of the simplest construction and of universal use. We have, for instance, found it for two seasons past almost impossible to procure at the western extremity of this State, a well-constructed durable hoe, rake, pitchfork, or basket. Here are utensils that almost any mechanic can make, in use for thousands of years, and of absolute necessity, and yet not to be found of a proper kind in an extensive market. There are an abundance of the articles, to be sure, such as they are, and cheap enough,—for no one could object to the price; but being, like Pindar's razors, made only to sell, are so utterly useless to any but the manufacturer and merchant, as to leave it very questionable whether a person could not do almost as well without as with them.

"This vexatious condition of the tool market is, to a great extent, owing to the farmers themselves, who, in their eagerness to get things cheap, carry the principle so far, at last, as to get such as are utterly valueless. Axes, shovels, and spades, cradling and other scythes, are articles that subject the workman to so much less labor when good ones are used, that, for many years, by universal consent, only the best, *the very best*, would be tolerated; and it is no difficult matter to find, in every market, such as are made on the best principles, and of the best and most durable materials. The others, by almost as universal consent, have been allowed to deteriorate to a point beyond endurance. The only remedy we suggest, and it is a sufficient one, is for farmers to buy only the best, and give such prices as will enable the manufacturer to make a fair profit from them: the inferior he ought never to buy, if furnished at one-fourth the price of good ones. In this way he will always secure a supply of such as may be depended on. We need not add, that every farmer should always see that he has tools enough, and always in order, and always at hand, that time should not be lost in finding or putting them in order, when he ought to be at work with them. More time frequently is lost by borrowing twice of a neighbor, than would suffice to purchase the article, to say nothing of the loss and inconvenience to them, which is an item not to be overlooked by men of even moderate honor and integrity. Money cannot be put to better interest than in a surplus stock of good tools, if kept properly housed."

A CEMENT FOR STOPPING FISSURES IN IRON VESSELS.

Take two ounces of muriate of ammonia, one ounce of flour of sulphur, and sixteen ounces of cast iron filings or turnings; mix them well in a mortar and keep the powder dry. When the cement is wanted, take one part of this and twenty parts of clean iron filings or borings, grind them together in a mortar, mix them with water to a proper consistence, and apply them between the joints.

This answers for flanges of pipes, &c. about steam engines.—*Mechanic's Own Book.*

We make the following extract from an editorial in the American Farmer, and commend it particularly to the notice of Mr. Peyton, assuring him of that of which he is already probably aware, that the source from which the

suggestion emanates, entitles it to the highest consideration:

THE RUST.

We subjoin an article upon this subject from the pen of *W. M. Peyton*, Virginia, which we copy from the *Southern Planter*. This paper is written well, and we confess we incline to the same opinion of the writer with regard to the *cause* of the rust, though we are not so sure that he is right in the conclusion to which *his premises and reasoning lead him*. After ascribing the disease to "*excessive vegetation*" he says,

"If then I am right, is it not an evil without remedy—dependant upon the seasons, and of course beyond human control?"

Now, it appears to us, that some substances may be yet introduced, which will not favor this "excessive vegetation," by producing a more *gradual* decomposition of the manure applied, and consequently a more stinted supply of the nourishment of the plants. If this retardation of food can be effected, we can see no reason to doubt that the grain may be preserved from rust. It is possible, that by a change in the *rotation*—by making wheat, instead of corn, follow clover—and increasing the depth of ploughing, the desired healthful check may be given to the decomposition of the vegetable matter turned in. In addition to this too, it may be found salutary to sow plaster over the clover before ploughing it down, as an auxiliary agent in preventing the too rapid decay of the vegetable matter. *Leibig*, who we must confess, we believe to be the first writer who ever explained, upon just principles, the mode of the operation of plaster, says:

"The action of gypsum (plaster) really consists in its giving a *fixed* condition to the *nitrogen*, or *ammonia*, (food of plants) which is brought into the soil, and which is indispensable for the nutrition of plants."

In further illustration of his views, he says:

"The decomposition of *gypsum* by carbonate of ammonia does not take place instantaneously; on the contrary, it proceeds very *gradually*, and this explains why the action of gypsum lasts for several years."

If then, Mr. Peyton be correct, in referring the cause of *rust* to "*excessive vegetation*," or in other words, to an over, or superabundant supply of nourishment, we would respectfully ask, whether a corrective might not be found in the plan we suggest. At all events, the character of the *food* which the plants would receive from decomposing clover, would be much milder than that it extracts from the manure usually applied to corn, which is, generally, the grossest and strongest on the farm; and perhaps, notwithstanding the supply afforded to the previous year's corn crop, still too strong for the nature of a plant so delicate as *wheat* is known to be.

But, if in addition to the more bland character of the manure arising from the decomposed clover, we are able to *regulate the supply*, by means of the retarding principle ascribed to the action of plaster, may it not be, that, in the combination of the two, we may find the very thing to prevent the occurrence of the disease whose effects are so disastrous to the wheat grower? We merely throw out this idea for the consideration of others better able to form an opinion than ourself; and from the pleasure we have received from reading the communication of Mr. Peyton, should be pleased to see his views upon the subject.

Again—the Editor of the *Southern Planter*, in a brief article upon the virtues of *salt* as a manure, says:

"The best opinion seems to be that it operates chiefly by producing or preventing the decay of animal and vegetable matter in the soil, consequently the quantity applied should be proportioned to the quantity of these constituents: for it is a well known fact that a small quantity of salt promotes decay, whilst a larger quantity is universally used to prevent it."

The virtues here ascribed to *salt*, we know from experience in its use upon corn, at the rate of *six* bushels to the acre, to be correct. For we had evidence in the growth and ripening of that plant, in the same field, all of which had been manured and treated precisely alike, with the exception that one acre had been *salted*, the other not, that the decomposition of the manure was carried on much slower on the part salted than on that which was not. Long after the blades on the latter part were *fired*, the former remained a dark green, presenting a most healthful condition, though evidently slower in its growth of stalk, and later by a few days in the maturation of its grain.

We have alluded to the effect of *salt* here, because we are of opinion that it may be made a useful agent in the prevention of rust, if sown on the field of growing wheat, in early spring; the which operation we would invariably follow with the harrow and roller.

These ideas are thrown out, as we have before premised, merely as suggestions, and we do so, thus early, in order that there may be time left to act upon them.

LARD OIL.

This is a new item in the domestic manufactures of the West. At Cincinnati there are now in operation three factories which consume daily from twelve to twenty barrels of lard. The oil, it is stated in the Cincinnati Republican, has already attained a high degree of excellence and popularity; and it is not only used extensively there, but is shipped to the East every week, thus completely changing the course of the oil trade. It is used for machinery on the Little

Miami railroad, in all the city works, at the hospital and asylum, in several of the churches, and in numerous stores and dwellings. It is very obvious that this new manufacture will be of the greatest importance to Cincinnati and to the West generally.

PLASTER OF PARIS.

Mr. ALLEN lays down the following rules and principles with respect to the use and application of plaster:

"1. It generally has little or no effect on strong clay lands; unless applied in large quantities, say fifteen or twenty bushels to the acre, when it has been known to change the character of a stiff clay in a single season, to a loose, friable, mellow and rich soil.

"2. It is used with great effect on dry, sandy, (not a barren sand,) or loamy soils.

"3. One to two bushels per acre, is considered a sufficient quantity to apply at once, though as high as six, have been sowed with marked advantage.

"4. Its effects last through two seasons, and frequently much longer.

"5. It should be sown generally in April or May; (and always applied when the ground is dry,) thus affording an opportunity for dissolving it by the rains. Its application to crops as late as June, have frequently been attended with decided advantages, though the large quantity of water required for dissolving it, being about 500 parts of water, at a temperature of 60 degrees to one of gypsum, renders the advantage much more conspicuous when sown earlier.

"6. The effects are much more striking when applied with manure, and sometimes with lime.

"7. It is a stimulant, as well as manure, and has a tendency to exhaust the humus or geine already in the ground, which renders it necessary to add manures occasionally, when the crops are carried off the ground; when they are consumsed on it, the soil is constantly improving without the addition of manure.

"8. It is in some instances a *specific* food of vegetables, by this means greatly increasing the quantity of some plants, as clover, sainfoin, and other of the broad leaf grasses; peas, corn, roots, &c.; while some of the narrow leaf grasses, and wheat, barley, oats, &c., are scarcely benefitted by it.

"9. In opposition to the suggestion of our correspondent, we have well attested experiments of its immediate beneficial effect on crops suffering from drought, before any rains had come to its aid; it having been in some slight degree dissolved by copious dews.

"10. Its application in the neighborhood of salt water, has seldom been attended with benefit, owing undoubtedly to its combining with the saline vapor, wafted to it by the sea breezes.

"11. Frequent benefit is derived from its use, on vines and other plants infested with insects, for though the diluted acid constituting a portion of it, may be highly beneficial to the vegetable, it is poison to the insect.

"12. Wet lands are not improved by it.

"13. Many soils are already so highly charged with gypsum in their natural condition, as to derive no benefit from an additional quantity. There is scarcely any saline substance more generally diffused, it constituting a portion of almost every soil, and is contained to a greater or less extent, in all river and spring water; and giving to the latter especially, when in considerable quantity, the character of *hardness*."

CEMENT.

In the New England Farmer, Vol. 12, No. 3, p. 21, we find the following statement:

"The late conquest of Algiers, by the French, has made known a new cement used in the public works in that city. It is composed of two parts of ashes, three of clay, and one of sand. This composition, called by the Moors, *Fabbi*, being again mixed with oil, resists the inclemencies of the weather better than marble itself."

Mr. Dorr, of Roxbury, called upon us, a few days ago, to look up the above article in our back volumes, and stated that he used a cement made according to the above directions, around the window casings of a stone-house he was building about the time this article appeared, and it has proved as good as the statement represents. It is as hard as marble, and will stick to wood as well as to stone.

GERMAN, OR FLY-PROOF WHEAT.

Cambridge, Md., July, 1842.

To the Editor of the American Farmer:

You have asked a report of the result of my experiment with the sack of German wheat which I purchased of you last fall. Concisely, I give it below:

The sack contained 2½ bushels; I seeded it on the 17th September upon two, precisely measured, acres; on this space were two varieties of soil, very opposite in character, one portion was a low, black, clayey loam; the remainder, a more elevated dry clay, equally rich: the growth was very luxuriant, and no difference observable in the two portions; its height was nearly six feet, with a large straw; it was a dense mass of vigorous vegetation—though partially attacked by the "fly," it sustained no apparent injury from it whatever; nor was it in the least affected by the scab, rust, or any other disease. It might have been harvested by the 17th June, but rainy weather deferred it to the

21st: the product was within a small fraction of fifty bushels, and its weight upon once through the fan was 62½ lbs. The grain is much more full and plump than the seed grain was: though it was quite as dark; and this (the color) I think, is the only exceptionable point of its character. I have tried a bushel of it for flour, but the miller reports it to have been too damp for a fair experiment.

It is, perhaps, worthy of remark, that, immediately alongside of this wheat, and on soil equal, or similar, grew several acres of the N. Y. white flint wheat, which was injured by the fly, though slightly, and finally *ruined* by scab and rust.

These facts were so conspicuous, that the lot containing the two varieties, being situated on the county road they attracted general attention, and its unusually vigorous and early spring growth was a matter of astonishment to all who saw it: and in this, and its early ripening, before the return of the blighting season, which is known to observe a very regular periodicity, consists no doubt the security of this grain against the usual disasters of other varieties.

Respectfully, JOSEPH E. MUSE.

This is the same wheat we last year received from Mr. Gray and advertised and sold under the name of "Fly-proof." We should be glad to hear from some of our customers how it has turned out. We are in daily expectation of another supply, and Mr. Gray writes us that the last season fully established its claims to be considered *rust* as well *fly* proof.

BLOWING ROCKS.

A much cheaper and safer way of breaking up rocks, may in many localities be used, instead of drilling and blowing them with gunpowder. The method referred to has been tried with great success in many instances. It is simply to build a fire with some dry wood upon them, and when they are well heated, throw water upon them, which will be as certain to break them as powder. In this way the largest and hardest rock may be reduced to small fragments in a very short time, by the labor of a small boy.

Newburyport Herald.

From the Farmers' Cabinet.

A FALLACY.

The popular idea of modern times, and of which our agricultural periodicals are constantly reminding the farmer, is to cultivate no more ground than can be well manured. Make your fields small, say they, that you may accomplish this end.

But the writer has been more successful in practising upon the converse theory, viz: extended cultivation on a small farm. Five years since he confined his operations to a small farm of little more than fifty acres of arable and meadow. The land was chiefly rough, and in a very moderate state of productiveness; soil loamy, with a good healthy clay subsoil. At present the face of it is pleasing to the eye; and, in point of productiveness, nearly double that of the former period. Only about thirty-five acres of it have been cultivated in grain and artificial grasses; the remainder in meadow, and lawn about the dwelling. Of the cultivated portion, the grasses are never suffered to lie longer than three years, frequently but two, and occasionally but one. The basis of this improvement has been moderate attention to raising and applying manures, all within the farm, excepting lime, (magnesia,) and one experiment of ground bones. He manures double the space usual among creditable farmers; and last year, by the help of an extra supply of fifty loads, obtained by soiling cattle before harvest, was enabled to manure one-fourth of the whole farm. If it be asked how so much manure is obtained, the answer is, chiefly by using straw for no other purpose than bedding for animals; feeding them on hay and the better portions of corn-fodder; winter-feeding a few cattle on meal and some roots; hauling most of the manure in the spring, and protecting the portion left for autumn use under cover, or thrown into shallow banks with earth over the top; by confining the cattle in their yard altogether, until the 15th or 20th of the 4th month; afterward, during a month, let out an hour or two every day—then, and not until that period, when the grass is strong, and operating as feed rather than physic, they go upon their permanent pasture.

It will be observed that this practice has resulted from a belief that the offal of crops is an ample basis for the manure which they require; and that, if only tolerably well managed, it is capable not only of supplying the annual exhaustion, but also of carrying on a progressive improvement. Consequently, extended cultivation, provided there be a just relation of the requisite number of animals for manufacturing the offal into manure, is believed to be advantageous to improvement of the soil, to the pocket of the husbandman, and to the country, rather than a stinted cultivation, which provides manure only in proportion to its limited extent, and looks to extensive grazing, or a disproportion of meat to the bread which is to accompany it. This just relation of tillage and of stock is supposed to be exactly that number of the latter which can be kept without eating up the source of manure offal of the crops; and, in summer, without pasturing very close, animal manure being looked upon only as a small ingredient to ferment the mass of vegetable matter; and all the better for

that object, when the beasts are kept in good plight, which feeding on hay instead of straw supposes, to say nothing of the superior profit of cattle so kept, and the humanity of it.

Frequent tillage, if supplied with its rights in manures, keeps the ground loose and lively for the largest product of grasses, supplying exactly what is wanted, in an abundant hay crop for winter; and for pasturage has the utmost value, when combined with a portion of perennial or green-grass meadow, where the cattle can roam from one to the other at their pleasure.

J. JENKINS.

West Whiteland, 4th mo., 9th, 1842.

INDIA RUBBER.

A new use has been found for this article at the South. They make large bags of it, which they fill with cotton and then float them down the rivers, as the lumbermen do their pine logs. Ninety-three bales were lately floated down the Alabama by this method. These sacks may supersede the "broad horns" on the Mississippi yet.—*Mechanic.*

For the Southern Planter.

CORN RAKES.

Gentlemen,—I see in the last number of your paper a communication headed "Corn Rakes," and signed E. G. I am inclined to think E. G. is one who from proper use has gone into ultra theory upon the subject of rakes. As you request an exposition of the objections to the use of rakes, I humbly offer mine, in hopes that they will at least call out others upon the subject.

E. G. says, "he knows they have been tried and discarded by some, but he is sure this has happened only where the experiment has not had a fair trial." Now, what is it reasonable to call a fair trial? I say, when a crop of corn is worked (when it needs working) with rakes, and another piece, at the same stage, and in the same field, is worked with hoes. This experiment I tried, and the result was, that the hoed corn so far eclipsed the raked, that many persons thought I had not worked the latter at all.

There is one advantage in the rake, and only one that I can see, and that is for cleaning and weeding very puny, small corn, which is so wet and foul that it cannot be well worked otherwise. But that advantage is attended with great risk, for should the field be so wet that it cannot be worked with the plough and hoe, it is because of a long rainy season, which will probably be followed by a very dry one. Thus, when the weather will permit you to use your rakes, the clouds will have dispersed, and the sun shining out kills the roots of your young and tender crop, as fast as you hackle and expose them. Again, it loosens the close, wet earth around the stalk, and lets the sun have a powerful effect upon the young and tender roots of the puny plant. Besides, when corn is infested with grass before it is large enough to be ploughed, it is very small indeed, and the grass is as large, or almost as large, as the corn, and it is growing so close to it that the roots are entangled with each other, and then to extricate the grass from the corn with the rough and merciless teeth of the rake, must, most unquestionably, injure or molest the whole stalk, and especially the roots, in which all the life of the plant is contained.

Now, is not example, practice and proof worth more than fireside theory and *philosophical* reasoning?*

Let any one try rakes, or any other implement, for hackling their corn roots, and they will pretty soon see the *benefit* they derive from them.

I do not mean to say that I am totally opposed to rakes. They certainly are most valuable farming implements, and useful for a variety of purposes, and *sometimes* almost necessary to save *some* corn; but, that they are very valuable for the cultivation of corn, and are worth five hundred dollars to the corn grower, I have every reason to deny.

A YOUNG FARMER.

TO WASH WOOLLEN GOODS.

The art of washing woollen goods so as to prevent them from shrinking is one of the desiderata in domestic economy worthy of being recorded; and it is, therefore, with a satisfaction we explain this simple procees to our readers. All descriptions of woollen goods should be washed in very hot water with soap; and, as soon as the article is cleansed, immerse it in cold water; let it then be hung up to dry.

Nashville Agriculturist.

TAMING HORSES.

Mr. Catlin, the celebrated Indian painter, says, that the savage tribes of North America are remarkable for the wonderful facility with which they subdue the buffaloes and wild horses of the prairie. This astonishing effect is produced simply by securing the animal, and placing the hand over the eyes and breathing into the nostrils, when it immediately becomes perfectly docile and subdued.

An English gentleman, Mr. Ellis, of Yorkshire, says he happened to read this account and

* I was glad to see the article of "Anti-Philosophy" in the Planter and to such philosophy I here allude.

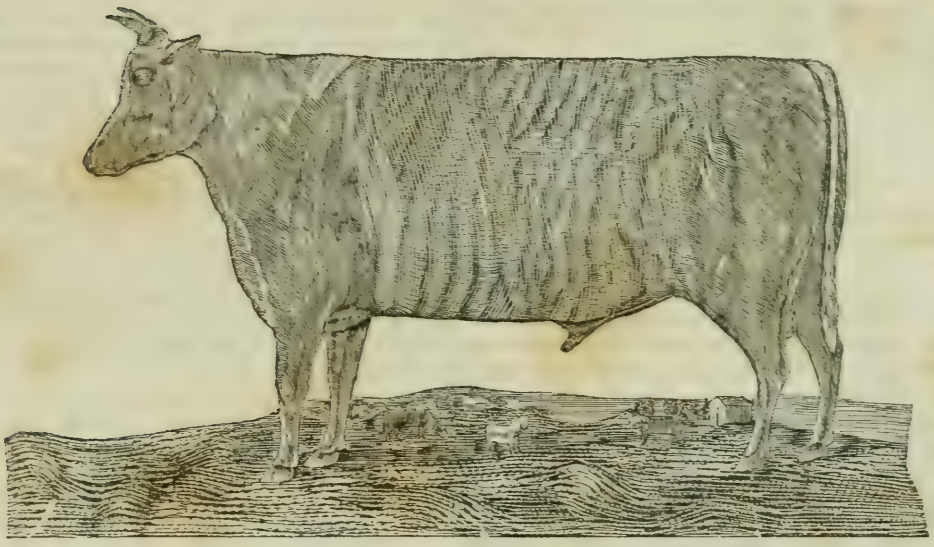
remained entirely incredulous of its truth, until two experiments upon unbroken and unmanageable colts satisfied him of its efficacy. He supposes this to have been the secret of the celebrated Irish whisperer.

INDIA RUBBER PASTE.

The following recipe, discovered by a Mr. Smith, of Baltimore, is highly recommended as a water-proof covering for boots and shoes. The following preparation is said to be sufficient for fifty pair of shoes.

Take three ounces of gum-elastic, cut it into fine shreds; put it into a gallon jug, add to it three quarts of Seneca oil; let it stand three or four days, when the gum will have been dissolved and the paste fit for use. Stir before using; then rub the uppers and soles of the boots and shoes well with it three or four different times before the fire, so long as the leather will absorb it. The degree of comfort which the mixture will insure to the wearer of heavy boots can only be realized on trial. It might be used with an equally good effect upon the harness and gearing of work-horses, and we have no doubt make one pair last as long as two.

LAIRD.



The above portrait represents "Laird," an Ayrshire bull purchased by my father of C. M. Bement, Albany, New York. He is an animal of great power, and considerable size, but very low, being short in the leg, and very deep from the back to the bottom of the belly—his color is red and white, with a yellow skin, that handles extremely soft and mellow to the touch—he is the easiest animal to keep fat I ever saw—he was purchased particularly on account of the great milking qualities of his family—his mother, an imported Ayrshire cow, giving twenty quarts per day while suckling him. It is quite remarkable how he impresses his own form on all of his get. His face is white, and he has never in two years gotten a calf, no matter what the color of the dam (and they have been of all colors) that had not a white face. I think for the small farmer, or he who is "*blessed*" with poor land and scanty pastures during summer, that this breed is better adapted than any other of the many valuable kinds which have been imported into this country from Great Britain, and at such enormous expense and risk. Without any disposition to disparage the Durhams, I confidently assert that the Ayrshire is much the best suited to Eastern Virginia and the South generally, and those who wish to commence a stock of fine blood cattle would do well to give to this breed mature consideration and a thorough examination before passing it by for larger and heavier animals, whether of the Durham or Hereford breed. They are particularly prized in Scotland as "the poor man's cow," and I think all things considered, they will prove to be the best and most productive stock for us.

L. M. Burfoot.

For the Southern Planter.

HENRICO AGRICULTURAL AND HORTICULTURAL SOCIETY.

The next meeting of this Society will be held on Wednesday, the 19th day of October next, commencing at Goddin's Spring. The Society will be called to order at 11 o'clock precisely, when the report of the Executive Committee and Committees of Award will be read; after which, the annual election of officers of the Society will be made.

At 12 o'clock, the first day's exhibition will commence with stock, agricultural implements, &c. and a fair be held for the sale of such stock and other articles as may be offered.

The following premiums will be awarded on the first day:

No. 1—For the best stallion calculated to produce stock adapted to the saddle, harness or draught, $15 00

Committee—Gen. Bernard Payton, I. A. Goddin and Ro. Carter Page.

No. 2.—For the most highly improved and best cultivated farm, a premium of $25 00
For the second best, 20 00
For the third best, 15 00
For the fourth best, 10 00

Reference being had to the means (as well pecuniary as others) of the proprietor for improvement—the amount of labor employed—the advantages resulting from the vicinity of the farm to the city, &c. The object being to place the industrious cultivator, with limited resources and no other labor than his own, upon the same footing with the largest cultivator with ample resources. It is to be distinctly understood, that not only the actual fertility of the soil will be considered, but special attention shall be paid to the means which are in operation for enriching the farms; to the condition of the enclosures; to the mode of cultivation, whether conducted with neatness, system and economy; to the condition of the stock, and especially whether provision has been made for their comfortable accommodation in bad weather. The buildings also, farming utensils, garden, and every thing connected with the comfort and prosperity of the establishment, will come under the review of the Committee.

Committee on Farms—John Carter, George M. Savage, Charles Marx, Henry L. Carter, and William Miller.

No. 3.—For the best field of corn, not less than five acres, $15 00
For the second best, 10 00
For the third best, 5 00

No. 4.—For the best crop of turnips, not less than half an acre, $7 00
For the second best, 5 00
For the third best, 3 00

No. 5.—For the best crop of beets, carrots and parsnips, not less than half an acre, $7 00
For the second best, 5 00
For the third best, 3 00

No. 6.—For the best crop of Irish or sweet potatoes, not less than half an acre, 5 00
For the second best, 4 00

Premiums 3, 4, 5 and 6 will be determined as follows:

The Committee of Award heretofore having found it extremely inconvenient and burthensome to go over the county, and in some instances, out of it, to view the crops offered for premiums, and impossible to view them all, the Executive Committee have resolved, that for the present year at least, the proprietor of each crop of corn offered, shall at his own trouble, procure the attendance of two respectable and disinterested freeholders, who shall carefully view the crop, and after fixing upon a spot which shall be neither the best nor the worst, but shall afford, in their candid judgment, a fair average of the whole, shall proceed with a rule, chain or any other instrument, by which exact accuracy may be attained, to measure off one-eighth of an acre. The crop on this spot shall then be gathered, shucked and fairly measured, heaping measure, in the presence of said freeholders, who shall certify under their hands, the precise contents, as also the supposed size of the field. This certificate shall be forwarded to A. Robinson, Jr., Secretary and Treasurer of the Society, by the 15th October, and be by him delivered to the Executive Committee.

Crops of turnips, beets, potatoes, &c. to be ascertained in the same mode, except that the ground measured shall contain five square yards. Certificates to be forwarded as before.

No. 7.—For the best crop of cabbages, not less than half an acre, $5 00
For the second best, 4 00

Committee.—Francis Staples, Jesse Williams and J. M. Sublett.

Ploughing Match.—C. W. Gooch, W. C. Allen, W. B. Sydnor and Albert G. Hobson are appointed a committee to arrange and conduct a Ploughing Match, on such principles as they may agree upon, and premiums of $10 and $5 are placed at their disposal to be awarded as they may determine.

Committee to arrange and conduct the first day's Exhibition.—Wm. D. Wren, C. T. Botts, Richard G. Tunstall and Edwin Hill.

Committee to receive Delegations from other Societies—Richard B. Haxall, Wm. H. Richardson and James R. Bridges.

A substantial farmers' dinner will be provided on the first day by Capt. Goddin, for the members of the Society and such others as may desire to participate.

The members of this Society are particularly requested to wear the customary badge of green ribbon on the left lappel of the coat.

The mechanics of the city, and others to whom it may be convenient, are respectfully requested to send to the exhibition such specimens of their own skill and industry, especially agricultural implements, as they may think proper to have exhibited, either on the first day or any succeeding day.

Proprietors of live stock of all kinds, whether members of the Society or not, are also requested to send it forward for exhibition. It is a particular object of the Society to bring together at their fairs all those who desire to purchase, and to accommodate all, as fully as possible. The agricultural portion of the exhibition and fair will be continued, if necessary, on the second day. The most particular and ample arrangements have been made for the accommodation of stock, for any number of days, and it is desirable to have it on the ground by the evening preceding the first day's exhibition.

The farmers of the State, and all others who feel an interest in the cause, are respectfully invited to attend.

The succeeding portion of the Society's exhibition will be held in the city, in the largest room or rooms that can be obtained.

Committee to select a place for, and conduct the same.—William B. Chittenden, Gustavus A. Myers, Peter W. Grubbs, Richard Hill, Jr., Wm. McCrery and Charles S. Thompson.

The address will be delivered at the commencement of this part of the exhibition, after which the following premiums will be awarded:

No. 1.—For the neatest and most substantial counterpane, $6
For the second best, 4

No. 2.—For the neatest and most comfortable mattress, filled with hackled shucks or cotton and made at home, 5
For the second best, 3

No. 3.—For the best comfort, 5
For the second best, 3

No. 4.—For the best quilt, 5
For the second best, 3

No. 5.—For the best table cloth, 5
For the second best, 2

No. 6.—For the neatest and most substantial carpet, not less than 10 yds. 6
For the second best, 4

No. 7.—For the best hearth rug, 5
For the second best, 3

No. 8.—For the best specimens of stockings, socks, gloves or mittens, of Virginia raised silk, thread, wool or cotton, worsted or mixed, 5
For the second best, 4
For the third best, 3

No. 9.—For the best specimen of fruits—apples, pears, peaches, &c. $5
For the second best, 3

No. 10.—For the best specimen of dried fruits, not less than half a bushel, 5
For the second best, 3

No. 11.—For the best specimen of domestic silk, the production of the exhibitor, 5

Committee to award the eleven last mentioned premiums.—Wm. Mitchell, Jr., Mann S. Valentine, Thomas R. Price and Charles Palmer.

No. 12.—For the best specimen of plants, shrubs or flowers, $10
For the second best, 5

Committee.—Nicholas Mills, Thomas Ritchie and Loftin N. Ellett.

Premiums will in all cases be given in money or plate, at the discretion of successful competitors.

The Committees appointed to act upon subjects requiring early attention, are requested to organise promptly.

The Executive Committee will be ready at all times to give attention to any calls upon them.

THOMAS S. DICKEN.
JOSEPH RENNIE.
WILLIAM D. WREN.
WM. H. RICHARDSON.

GRASS.

We have, over and over again, urged upon our readers the value of the grass crop. This is the season for seeding, and we hope it will not pass without seeing thousands of acres laid down to grass. We should most undoubtedly be exporters, instead of importers, of hay, and we rejoice to see that the success of some of our most distinguished farmers is daily removing the erroneous impression, that this crop, productive of more clear profit than cotton in its palmiest days, is unsuited to our soil and climate. The following extracts upon the proper mode of seeding grass lands are taken from that excellent agricultural paper, the Massachusetts Ploughman, and meet with our hearty approbation:

"In a former number we have reminded our readers of the advantages of seeding on a green sward furrow; we shall now state the mode of ploughing and of seeding which we have found the most safe and profitable.

"We turn the furrow over as flat as we can—if there are many rocks or stumps in the way it will be well to have one hand with a hoe to lay flat those sods that the plough did not turn well. After the ploughing is finished a good roller should be used to fit the sods more close and to

prevent their being torn up by the harrow. The next step is to haul on the manure.

"As soon as the manure is spread the harrow should follow to mix it thoroughly with the mould of the furrow. The harrow should at first be drawn lengthwise of the furrow to avoid tearing it up; it may then be drawn in a diagonal direction, varying, however, but little from the range of the furrow, and it is not advisable to draw it directly across in any case.

"After the ground has been well harrowed the seed may be sown. We find one peck of good herdsgrass and three or four pecks of red-top sufficient for an acre; and we prefer to cover the seed by dragging a bush harrow over it. The roller may follow if you choose; and if any loose sods remain on the surface they may be raked into the dead furrows or other low places in the field.

"A fresh furrow will be more moist than one that has been turned several days, and seed will vegetate sooner on it. When the season happens to be dry, therefore, it is well to plough but one acre at a time and then throw on the seed.

"All farmers know that lands which lie high and have lain in grass three or four years, need some renovating process or they will yield not half a crop. All know how difficult it is to keep all the high land, not in tillage, in good grass; for so much manure is required for planting and raising exhausting harvests of grain that many fields are suffered to lie fifteen or twenty years, not in grass, precisely, but with something on them that yields no profit. Now the great objects we have in view in the 'New Husbandry' are to keep all our grass lands in such a condition as to obtain good harvests; and to avoid planting so much as to take up all the manure in tillage. To bring our old bound-out mowing lands directly into grass again without the expense and the delay of a three year's course of tillage. We also wish to avoid the risk which we usually run, when we sow grass seed with spring grain, of having it summer killed on taking the grain away.

"We, therefore, cut across lots—we turn the furrow over at the very best time for seeding, and we avoid exhausting the soil by crops of grain. We save a green crop under the furrow, and we miss no harvest; we have no fallow for the year. In this way we may give every acre a taste of the manure heap; for instead of giving one field a full dressing two years in succession, we give but half a dressing, and for one year only; thus we are enabled to go the rounds of our mowing fields four times as fast as by tilling and raising exhausting crops.

"The new system admits of ploughing low, cold, wet, lands, altogether unfit for tillage, and seeding at once on the furrow. And one great advantage gained by this system is, the land thus seeded will lie more light and will continue in grass two years longer than land which has been two or three years in tillage."

THE PLANTER.

We copy the following from the Hillsborough Recorder and hope, since we have afforded our brother Editor an opportunity of judging of the merits of the Planter, he will be almost ready to endorse the flattering estimate of his judicious correspondent:

"We are not acquainted with the work mentioned below, and cannot, therefore, from any knowledge of our own, comply with the wishes of our correspondent in recommending the work to our readers. But we have confidence in our correspondent, and know that his judgment, having been assisted by experience, is far superior to our own in this matter: we, therefore, publish his note.—Ed.

"'*Mr. Heartt*,—If by recommending to your farming subscribers the *Southern Planter*, edited by Botts & Burfoot, Richmond, you could induce them all to send for it, I don't know how you could do them a greater service. I have it from the beginning—January, 1841—and am sure that I do not exaggerate, when I say, that any one of the nineteen numbers in my possession is worth the whole price of the paper per annum, i. e. one dollar, if paid within sixty days from the date of subscription, free of expense to the editors. It is edited by practical southern farmers, and suited to our southern climate and products. Besides it is done up in pamphlet form, with neat paper covers, and is, therefore, more convenient both to read and to preserve.

Yours, &c.

An Orange Farmer.

August 15, 1842.'"

MEDITERRANEAN WHEAT.

Patent Office, July 20, 1842.

Messrs. Botts & Burfoot:

Gentlemen,—I have the honor to transmit a parcel of Mediterranean wheat, respecting which much has lately been published, and the peculiar qualities of which are described in the accompanying letters from Dr. Smith, of Philadelphia, and Mr. Powell, seedman, in the same city.

I am, most respectfully yours,

H. L. Ellsworth.

—

Philadelphia, July 14, 1842.

Dear Sir,—Yours of the 6th instant, came duly to hand, and I should have answered it sooner, had business and other circumstances permitted.

That variety of the Mediterranean wheat which I have sown for several years past, I con-

sider *proof* against the *fly* and *almost* proof against the *rust*.

For the former, no rational explanation has thus far been given; but the instances have been so numerous where *this* and the *other kinds* of wheat among us have been sown on adjoining lands in the same field, with cultivation precisely the same—where *this* has remained untouched by the fly, producing a heavy crop, and the *others* almost entirely destroyed, that the most sceptical have no longer any doubts upon the subject.

But that it should so *generally* escape the mildew we have endeavored to explain from the fact, that it ripens from ten to twelve days earlier than any wheat *now* sown in the middle or eastern States (as far as my knowledge extends) But that this is a full and satisfactory explanation I am not entirely prepared to believe; for the causes to which we have generally attributed the production of mildew *may* exist, when this wheat is *susceptible* of being acted upon by them, as well as the other kinds.

These causes we understand to be:

1. That state of the *plant* when the grain is fully formed but very soft and milky, the whole energies of the plant directed to its perfection, and the sap vessels all distended.

2. That state of the *atmosphere* which tends still farther to distend the vessels; as heavy dews, and fogs and clouds, which obscure the sun for several hours after his rising.

3. A sudden outbreaking of the sun, with such *power* as to rupture the sap vessels of the plant, thereby giving a nidus for the seeds of the parasite to take root.

But be the causes what they may, *it is rarely* injured by the *fly* or *rust;* nor are these all its advantages over any wheat among us. For it may be sown from the first of September to the middle of October, and upon soil so thin that the farmer would not think of sowing any other kind of wheat, and yet produce a fair crop.

I have sown it for two years, after a crop of corn and potatoes had been taken from the ground, and fully believe, that the yield after the potatoes, was upwards of thirty bushels to the acre.

If sown early one and a half bushels per acre will be enough, but if not sown till in October, at least two bushels should be sown.

Now, although the straw is so soft that it will most certainly fall in rich ground, still it ripens well, even should the timothy grow up through it and hide it from view. And although the grain is not so white and mellow, as some other varieties of wheat, still, that it will produce more superfine flour to the acre for a given number of years than any other wheat now extant, I feel no hesitation in asserting.

I shall be able to supply any moderate quantity in time for sowing, delivered at any place to be mentioned in Philadelphia.

With sentiments of regard,
I remain your friend,
Moses B. Smith.

Hon. H. L. Ellsworth,
Commissioner of Patents.

—

Philadelphia, July 14, 1842.

H. L. Ellsworth, Esq.

Dear Sir,—So far as heard from, the Mediterranean wheat grows more in favor as it becomes better known. Mr. White, formerly a merchant of our city, stated to me last fall, that he had tested side by side with two or three others, and that this was the only one escaped rust, fly, &c. It is an early wheat, adapts itself to the generality of soils, but especially to light land—and as it becomes acclimated assumes more the cast of our Orange wheat. I find a concurring opinion from many neighborhoods, that the Mediterranean wheat this season, exceeds by great odds, all other varieties. I can supply a clean good article, as per sample, at $1 75 per bushel.

Very respectfully,
M. S. Powell,
23 *Market Street.*

The parcel for which we are indebted to the kindness of Mr. Ellsworth is at our office for distribution. The wheat presents a good deal the appearance of that sent us last year by Mr. Gray, but is, we think, lighter and darker. Our millers to whom we have exhibited the specimen unequivocally condemn it as tough, coarse, and indifferent. One of them went so far as to say that he would not recommend the farmers of Virginia to cultivate even if he *knew* it to be invulnerable to fly and rust; another said that it was at least ten cents in the bushel below what he would call good wheat. We feel it our duty in making public the recommendations of others, to state thus fully the opinions of gentlemen, entitled to so much weight as the millers of Richmond, and this course, if we understand him rightly, Mr. Ellsworth will be the first to approve.

For the Southern Planter.

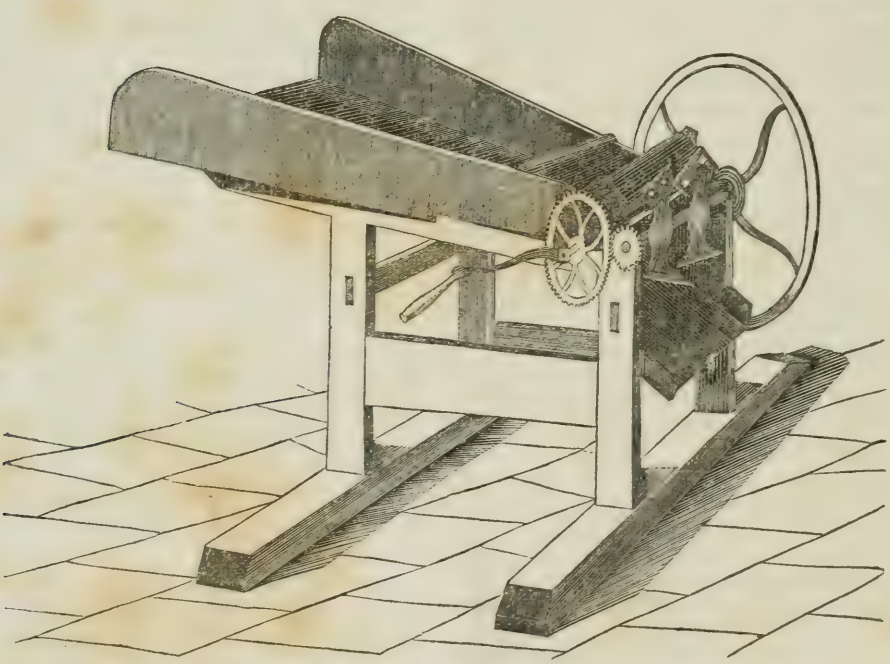
I was much pleased on reading the last number of the Southern Planter to see that my friend Gen. Wm. H. Richardson had accepted the proposition made by me some time since, to feed some of my best Berkshires against pigs of any other breed in Virginia. I was pleased for two reasons—first, because the General was the man to accept the proposition, well knowing that I would then be contending against one

who is incapable of practising any thing unfair in the experiment; and also that he would conduct it in such a way as to make his pigs *all* that the breed was capable of being made by unceasing attention and the most skilful management; and then if my Berkshires triumphed they would be entitled to so much the more credit. Secondly, because the white hogs of Mr. Dicken's were the hogs to be fed against my Berkshires. These hogs have obtained considerable notoriety, and if they are or can be made superior, or equal, to the best Berkshires, I, for one, am anxious to ascertain the fact, as I will then purchase a pair of the best of them.

The General and myself then will feed four pigs each next spring; he four of Mr. Dicken's white pigs, I four of my Berkshires, up to the age of ten months, &c. &c. as proposed in my former communication.

I hope the General will inform me at what time, as near as can be, he expects the birth of the pigs, which he intends to feed, so that I can breed mine at the same time, it being very important to have them of the same age.

L. M. Burfoot,
Chesterfield, Va.



THE FARMER'S REPOSITORY.

The subscribers have taken the room formerly occupied by the Exchange Bank, (nearly opposite the Bank of Virginia) in which they design to open an agricultural wareroom and an agency for the general transaction of agricultural business. They will buy and sell upon commission crops, seeds, and implements; in short, they offer their services to the agricultural community for the transaction of any business in this city, where the offices of an agent may be required.

They design to keep themselves constantly supplied with every variety of tool, implement, or agricultural product, that can be either useful or interesting to the farmer. To effect this object, one of the partners is about to leave for the North, in the expectation of making such arrangements as will enable them to afford facilities to the farmers of Virginia, that they have never heretofore enjoyed.

They are now manufacturing, and have ready for sale, their Straw Cutter, highly improved. The inventor has been long ago satisfied, that the qualities required in a straw cutter, were

simplicity and durability rather than rapidity of execution. We had many cutters that, whilst in order, were sufficiently efficient, but it is a notorious fact, that, from the failure to bring them within the power of a negro's management, they have generally been abandoned for the clumsy and imperfect cutters made by the common blacksmiths of the country.

Keeping this fact in view, and thinking it comparatively unimportant whether it required one minute or two to cut a bushel of straw, the inventor, who has had some mechanical as well as agricultural experience, applied himself to the construction of a knife, which, if it was less rapid in execution, should be more durable, and within the control of the simplest capacity. He found this no easy task, but after years of thought and trial, he flatters himself he has more than accomplished his undertaking, for, whilst he thinks that the knife is perfect in simplicity and ease of management, its efficiency is not inferior to that of any other in use.

Although others were perfectly satisfied with the knife as it was made twelve months ago, the proprietor was not. He has finally succeeded in rendering it still more simple, and it is now offered to the public without fear of competition.

The nature of the last improvement consists, chiefly in shortening the knives, and is attempted to be represented in the accompanying engraving. They are now not wider, and are as easily ground and set as a plane-iron. Except to turn the crank, this is all that the operator has to do, from one year's end to another.

These cutters are made up in the most perfect and substantial manner, and although the work upon them has been a little increased, yet, in consideration of the "times," and in hopes of securing larger sales, the proprietors have determined to offer them at thirty and twenty-five dollars. An attempt was once made to reduce them as low as twenty dollars, but it was found that it was only practicable to do so at the expense of substance and durability in the machine, and the design, after much expense encountered for patterns, &c. was abandoned with the first dozen that were made.

The thirty dollar cutter corresponds to the one that was formerly sold at thirty-five, and the one offered at twenty-five is rather lighter and a little different in construction.

One principle the subscribers have determined to adopt and rigidly maintain, esteeming it equally beneficial to themselves and their customers; this is to buy and sell for CASH only. Buying for cash, they will of course procure their articles on the best terms, and determined to be satisfied with very small profits, they hope to be able to furnish them as low as they can be had in the Union.

C. T. BOTTS.
L. M. BURFOOT.

P. S.—The Office of the Planter is kept in the rear of the Wareroom, where the Editors will be happy to see their country friends generally. To make such a visit the more interesting, they are making collections of drawings, and models, and curious agricultural products, to which mechanics and farmers are respectfully requested to contribute.

ROTATION OF CROPS.

By particular request we make the following extracts from a communication in the Farmers' Register.

Although we are fully assured that philosophers and chemists have frequently drawn upon their imaginations for facts otherwise difficult of attainment, and although we believe that discredit has been brought upon the philosophy of agriculture by the want of practical knowledge in some of its most distinguished votaries, still, we are undoubtedly indebted to the chemical investigations of modern times for a knowledge of some principles established almost beyond dispute. Amongst the most valuable of these, we had classed the fact presented by chemical analysis of the different and opposite constituents of different plants, from which has been drawn the most perfect system of a rotation of crops, upon the principle, that whilst one crop was consuming certain constituents, nature was elaborating others rejected by the growing crop, to be consumed by the succeeding and opposite one.—This principle has been denied and ridiculed by Mr. J. H. Turner in several articles in the Farmers' Register, and it is in answer to these views, and in defence of the established principle, that Mr. Peyton has written the article from which we copy below.

We have not been unobservant spectators of the contest between these distinguished gentlemen, and we have failed to give our readers heretofore the benefit of Mr. Peyton's handsome and able defence of the established doctrine,

simply, because it afforded so complete a refutation of Parson Turner's views. A novel idea had been advanced, and, in our opinion, clearly refuted. By giving both, we brought the reader, after some labor, exactly to the point from which he started. We never care to administer poison, for the sake of giving an antidote which we happen to have in our possession.

These considerations would still have precluded us from this subject but for the request of our correspondent.

After some preliminary remarks, Mr. Peyton, referring to Mr. Turner's opinions, asks the Editor,

"What do you think of the leading idea of his communication, No. 4, 'that a rotation of crops is unnecessary?' Is it not opposed to every opinion on this subject ever advanced by yourself? Is it not at war with every principle established by the experiments in vegetable physiology? Is it not directly in the teeth of all that is taught us by Sir H. Davy, Chaptal, De Candolle, Liebig, Buel, and every other agricultural writer of reputation? And lastly, is it not opposed to the experience of every farmer who does not live within the smoke of a city, where the fertility of his lots may be almost maintained by the continual presence of an atmosphere loaded with gases generated by the filth of a crowded population?

"It is a common observation of farmers in this quarter, that when lands are worn down with long continued and severe cropping, so that their yield in *grain* is not worth the labor of cultivation, they will produce a luxuriant crop of *clover*. Not less common is the observation, that old tobacco lots, when they grow tired of the crop which they have borne for a long succession of years, and refuse to produce the same heavily, however well cultivated or highly manured, can only be restored as a tobacco lot by a rotation. It would be easy to illustrate these opinions by many striking examples around me; but I deem it unnecessary to cumber this letter with them, as I presume there are palpable illustrations of their truth in every neighborhood in the State.

"We have always thought that these results were perfectly natural, and consistent with the organic laws of vegetable physiology. We have been content with the theory, that some plants require a peculiar species of food, whilst others require a different. That, of course, when the peculiar food of the cultivated plant was exhausted, it was no longer capable of producing it, whilst its adaptation to the growth of other plants, demanding a different *pabulum*, was unaffected. We have always believed, too, that the excrementitious matters, thrown off by plants, were as incapable of nourishing plants of the same kind, as the excretions of animals are of being assimilated by the same species. We have believed, too, that the analogy is farther maintained in this, that these excretions may nourish other plants, differently constituted, as the excretions of one species of animals affords nourishment to another. Such have been the opinions of all enlightened agriculturists for a great many years; certainly ever since the theory was revived and illustrated by the genius of De Candolle. Liebig, in his great work on agricultural chemistry, maintains it, with some slight modification, in all essential particulars. He thinks that the excrementitious matters suffer various transformations in their passage through the organism of the plant, (pp. 54 and 55,) till at last, being capable of no further changes, they are separated from the system, by the organs destined for that purpose. That these exudations, though they may be absorbed, can never (until decomposed) be assimilated by the plants producing them, while they may very well be fed on by plants differently organized.

"Independent of the cogent inferences from the known principles of vegetable physiology, in support of this theory, the experiments of Macaire Princep, alluded to by Liebig, seem to place its correctness above controversy. How will Mr. Turner, except upon the principles here advocated, explain the fact that plants of the *leguminosæ* family, wither in the water in which the same species have grown until the excretions have colored it brown, whilst corn plants grow vigorously in the liquid, and the brown color diminishes sensibly with the growth of the plant.

"You will observe in this experiment, that the plants selected are unlike in their organism, and whilst the one feeds largely on the phosphates, and other requires scarcely any. I ask Mr. Turner if the inference is not irresistible, that the beans first grown in the water, had destroyed its fitness to sustain a second crop of them, either by exhausting the peculiar food on which they fed, or by *poisoning* the water with their excretions? It is not equally clear, that at the same time that the liquid was thus rendered unfit for the support of beans, it still retained a capacity for producing corn, and that this corn, instead of rejecting, actually fed upon the exudations of the beans? If true, as is proven, with regard to the *water*, I would again respectfully ask your intelligent correspondent, would it not be equally true of the *soil?* Can there be any difference, when every thing absorbed by a plant from the soil must necessarily be previously dissolved? I am sure he will at once admit that the second fact is a legitimate corollary from the first, and in so doing his own theory loses its foothold, and falls to the ground. If this experiment were not so perfectly conclusive, it would be very easy to pile proof upon proof, 'Pelion upon Ossa,' in support of it.

"Liebig relates an instance of a landed proprietor in the vicinity of Göttingen, who, to obtain potash, planted his whole farm with wormwood. The consequence of which was, that it so effectually exhausted the potash in the soil, that it was incapable of bearing grass for many years—the grass requiring a large supply of the silicate of potash.

"In combatting these universally received opinions, Mr. Turner sets out, rather ominously, in the midst of a strange confusion of technical terms, and an entire misapprehension or misapplication of authors quoted, and when he has thus, under the delusion of an honest zeal for his theory, dove-tailed an ingenious and plausible argument, he then endeavors to varnish over the whole with some striking facts.

"In adverting to this part of Mr. Turner's essay, I will not confine myself to his precise language where it is unimportant, as it would unnecessarily lengthen what I have to say, but merely quote the substance.

"He says there is one ingredient which is necessary to all crops, and that ingredient is *fertility;* and that this ingredient is just as necessary to one crop as another. *Fertility*, as understood by him, is synonymous with humus, as understood by Prof. Webster, geine, as called by Professor Dana, and ammonia as maintained by Liebig. He makes, in confirmation, an extract from the Second Report on the Agriculture of Massachusetts, whereof Professor Dana says, 'If we can induce the state of geine best fitted for each plant, then adieu to the doctrine of the necessity of a rotation of crops.' Without quoting farther at present, let us halt and review the ground.

"That this *fertility* here referred to, and easily comprehended by every farmer, is not, as Mr. Turner supposes, synonymous with humus, geine, &c. will be perfectly obvious when it is recollected that many plants, wheat, for instance, will not thrive in pure humus. The word fertility, as used by Mr. Turner, is much more comprehensive. Liebig states that, in many parts of Brazil, where the soil is particularly rich in humus, wheat will not thrive, and in many parts of Europe, where they have formed soils of mouldered wood, [pure humus,] it has been attend with the same result. The stalks attain no strength, and droop prematurely. The cause assigned is, that the strength of the stalk is due to silicate of potash, and that the grain requires phosphate of magnesia, neither of which substances a soil of humus can afford. Liebig adds that wheat will not flourish on a sandy soil or a pure calcareous soil, (*e. g.*, the bald, calcareous prairies of Alabama,) unless it be mixed with a considerable quantity of clay. These soils are deficient in the alkalies, which are indispensable constituents of wheat, while potash and soda are universally present in clay.

"But Professor Dana says, 'if we can induce the state of geine best fitted for each plant, then we may bid adieu to the doctrine of the necessity of a rotation of crops. This may be true, but the very condition on which it is made to depend destroys its applicability, as used by Mr. Turner. '*If we can induce the state of geine,*' &c. is the language of the author. But how induce it? Geine or humus, or to be more specific, the decomposed organic matter of the soil can only be brought to the state necessary to give vigor to the growth of plants indiscriminately by the presence of alkalies. Humus is not soluble in any useful degree in water, requiring as it does two thousand five hundred parts of water for one of humus, while it is readily soluble in alkalies. If then you can always have the requisite supply of alkalies present, you at once induce that state of geine so much desired by Professor Dana. But can any practical mode be devised of effecting this, other than a judicious rotation of crops, which will feed successively on the different constituents of the soil, and give to the great laboratory of nature time to restore what has been taken away?

"But Mr. Turner, feeling probably the weakness of his argument, and the inconclusiveness of his authority, endeavors to sustain himself by a few isolated facts. It seems to me, however, that little weight should be given to these few straggling examples, ('*rari nantes in gurgite vasto,*') which his industry has picked up over our extended country, against the proofs of philosophical investigation, and the almost unanimous testimony of enlightened farmers in every quarter of the world. It is an old adage 'that a single swallow does not make a summer,' and my Lord Coke says, that exceptions to a general rule, instead of weakening, prove it. The most striking example relied upon by Mr. Turner is that recorded by Mr. Colman, the Massachusetts commissioner, who says, that he saw a rich alluvion field on the Connecticut river, the proprietor of which told him that without any manure it had continued to produce good crops of wheat for thirty years in succession. This, you will observe, is a piece of intervale land on the borders of a stream whose low grounds are of remarkable fertility, and whose inundations annually, or at intervals of several years, may have deposited new soil, and thus maintained its capacity to produce the same crop. The Nile, the Po of Italy, and many of the principal rivers of France, have long been employed as fertilizers of their low lands, and wherever they have been able to irrigate them, they exhibit the same capacity for production with the example cited by Mr. Colman. The most important alkalies always abound in such lands. The overflowing waters, too, hold oxygen in solution, and are thus enabled to act promptly and effectually in producing the putrefaction of the excrementitious

matters contained in the soil. But, Mr. Editor, I did not take up my pen with the view of discussing this question with so skilful an antagonist as Mr. Turner, but merely to draw your attention to the subject, that you may enter the lists, and allow me to retire. This letter has insensibly grown to so inordinate a length, and so contrary to my intentions, that I feel that I almost owe you an apology for troubling you with it. When I had once embarked I found all my efforts to regain the shore fruitless, until the present moment.

Yours respectfully,

WM. M. PEYTON."

M'CORMICK'S REAPING MACHINE.

Since the publication of our last we have received several additional certificates of the superiority of this implement, and also a statement from the inventor that he is prepared to furnish machines of the best quality for $100, or to sell rights upon accommodating terms. His address is Steele's Tavern, Augusta, Virginia.

RECIPE.

The fumes of brimstone are useful in removing stains of linen, &c.—thus, if a red rose be held in fumes of a brimstone match, the color will soon begin to change, and at length the flower will become white. By the same process, fruit stains or iron moulds may be removed from linen or cotton clothes, if the spots be previously moistened with water.

TO CORRESPONDENTS.

We are much obliged to J. M. of Fredericksburg, for his valuable communication. We esteem it too highly to introduce it at the fag end of this number: it shall have an early insertion in the next.

Many other communications have been received, all of which will be duly attended to.

OUR LIST.

We cannot omit this opportunity to return our thanks to our friends for their successful exertions to increase our list. The number of subscribers we have received since our July issue has far exceeded our expectations, and is wholly attributable to the exertions of our friends, whose kindness we hope to have an opportunity of reciprocating.

THE NEW WORLD.

We acknowledge the liberality of the Editor of the New World, who is not only kind enough to exchange with us, but who lays us under additional obligations by the transmission of the *novel* publications of his extras. Mr. Benjamin, by the enterprize and spirit which he has exhibited in the attempt to cheapen American publications, has entitled himself to the gratitude and support of every lover of light literature.

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THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.*

Tillage and Pasturage are the two breasts of the State.—*Sully.*

C. T. BOTTS & L. M. BURFOOT, Editors.

VOL. II. RICHMOND, OCTOBER, 1842. No. 10.

AGRICULTURAL LETTER FROM GEN. WASHINGTON.

We are indebted to the kindness of an old friend for the following valuable document; valuable not only because of the revered source from which it emanates, but because it affords many excellent lessons from an able and practical farmer; it is too strongly characteristic of the American hero. We see here the exercise in private life of that attention to detail, that inflexible devotion to order and discipline, which so eminently mark the public character of Washington. No one can read this letter without seeing at once that the writer was an industrious, sound, *practical* farmer. He, whose indomitable energy had given freedom to a world, did not esteem the most minute details of agriculture unworthy his attention.

It will probably surprise the reader to find Gen. Washington insisting upon the use of harrows and cultivators in the cultivation of his corn; this we have been accustomed to plume ourselves upon asa much more modern invention.

This letter, directed to his overseers, is taken from the manuscript copy in Washington's own hand writing, and, as we are informed, now appears in print for the first time.

Philadelphia, 14th July, 1793.

Gentlemen,—It being indispensably necessary that I should have some person at Mount Vernon through whom I can communicate my orders;—who will see that these orders are executed; or, if not obeyed, who will inform me why they are not;—who will receive the weekly reports and transmit them;—receive money and pay it; and in general to do those things which do not appertain to any individual overseer—I have sent my nephew, Mr. Howell Lewis, (who lives with me here) to attend to them until I can provide a manager of established reputation in these matters. You will, therefore pay due regard to such directions as you may receive from him, considering them as coming immediately from myself. But that you also may have a general knowledge of what I expect from you, I shall convey the following view (which I have of the business committed to your charge) as it appears to me, and direct you to govern yourself by it: as I am pursuaded nothing inconsistent therewith will be ordered by Mr. Lewis, without authority from me to depart from it.

1st. Although it is almost needless to remark that the corn ground at the farm you overlook ought to be kept perfectly clean and well ploughed—yet, because not only the goodness of that crop depends upon such management, but also the wheat crop which is to succeed it, I cannot forbear urging the propriety and necessity of the measure in very strong terms.

2d. The wheat is to be got into the barns or into stacks as soon as it can be done with any sort of convenience, that it may not (especially the bearded wheat, which is subject to injury by wet weather,) sustain loss in shocks—and because the shattered grain in the fields may be beneficial to the stock; but no hogs are to be put on stubble fields in which grass seeds were sown last fall, winter or spring; other stock, however, may be turned on them, as it is rooting that would be prejudicial.

3d. The whole swamp from the road from Manley's bridge up to the lane leading to the new barn, is to be got into the best and most complete order for sowing grass seeds in August—or, at farthest, by the middle of September. The lowest and wettest part thereof is to be sown with timothy seed alone. All the other parts of it are to be sown with timothy and clover seeds mixed. The swamp on the other side of the aforesaid lane (now in corn and oats) is to be kept in the best possible order, that the part not already sown with grass-seeds, may receive them either this autumn (as soon as the corn can be taken off with safety) or in the spring, as circumstances shall dictate.

No exertion or pains are to be spared at Daguerun to get the swamp from Manley's bridge up to the meadow above, and the two enclosures in the mill swamp, in the highest order for grass, to be sown in the time and manner above mentioned. But that no more may be attempted than can be executed well, proceed in the following order with them accordingly as the weather may happen to be, for this must be consulted, as dry weather will answer to work in the low parts best, whilst the higher grounds may be worked at any time.

1st. Begin with the swamp from Manley's

bridge upwards, and get all that is not already in grass well prepared for it, and indeed sown. 2d. That part of the lower meadow on the mill run, which lies between the old bed of it and the race, and within the fences. 3d. After this is done, take that part in the enclosure above (which was in corn last year) lying between the ditch and fence of No. 1, up and down to the cross fences 4th. Then go over the ditch and prepare slipe after slipe as the ditch runs from the one cross fence to the other, and continue to do this as long as the season will be good, or the seed can be sown with propriety and safety.

I conceive that the only way to get these grounds in good order and with expedition, is to give them one good ploughing and then to tear them to pieces with heavy harrows. Whether it be necessary to cut down and take off the weeds previous to these workings can be decided better by experiments on the spot than by reasoning on it at a distance. My desire is that the ground shall be made perfectly clean, and laid down smooth; without which meadows will always be foul—much grass left in them, and many scythes broken in cutting what is taken off.

4th. The buckwheat which has been sown for manure ought to be ploughed in the moment a sufficiency of seed is ripe to stock the ground a second time; otherwise, so far from its answering the purpose of manure, it will become an exhauster. For this reason, if the ploughs belonging to the farm are unable to turn it in in time, those of Muddy hole, Dague run and Union farm, must combine to do it, the work to be repaid by the farm which receives the benefit, as soon as the work is accomplished thereat.

5th. Where clover and timothy seeds are mixed and sown together allow five pints of the first, and three of the latter to the acre; and where timothy only is sown, allow four quarts to the acre. Let the seed be measured in the proportions here allotted and put into a half bushel, and the half bushel filled with sand or dry earth, and extremely well mixed together in your own presence or by yourself, which will answer two good purposes, viz: 1st, to prevent theft, for seeds thus mixed, would not sell—and 2dly, the seedsman being accustomed to sow a bushel of wheat to the acre would be at no loss to cast a bushel of this or anything else, regularly on that quantity of ground.

6th. It is expected you will begin to sow wheat early in August, and in ground perfectly clean and well ploughed. I would have, and do accordingly direct that not less that five pecks of seed be sown on each acre. The plan of the farm over which you look is given to Mr. Lewis, from which the contents of each field may be known. And it is my express direction that every watch, and the best attention may be given, to see that this quantity actually is put in; for I have strong suspicions (but this ought not to be hinted to them) that the seedsmen help themselves to a pretty large toll.

7th. As soon as you have done sowing, and even before, if it can be done conveniently, you are to set heartily about threshing or treading out the wheat; and as fast as it is got out, to have it delivered at the mill or elsewhere, according to directions. The longer this business is delayed, the more waste and embezzlement will there be of the crop. The wheat is to be well cleaned; the chaff and light wheat are to be properly taken care of for the horses or other stock—and the straw stacked and secured as it ought to be against weather and other injuries; and until the whole be delivered it will require your constant and close attention.

8th. The oats at the farm you overlook, are, I presume, all cut; in that case, let all the scythes, and cradles, and rakes which you have received, be delivered over to the mansion house; or if you choose to keep them against next harvest, you must be responsible for them yourself.

9th. The presumption also is, that the flax is, ere this, pulled; let it be well secured, and at a proper season stripped of its seed and spread to rot. During this operation let it be often and examined, that it be not overdone, or receive injury in any other respect by lying out too long.

10th. Get the cleanest and best wheat for seed, and that which is freest from onions. I would have about one-third of my whole crop sown with the common wheat; one-third with the white; and the other third with the yellow bearded wheat. The overseers (with Davy, as he knows the state of his own farm and the quality of the wheat which grows upon it,) may meet and decide among themselves whether it would be best to have some of each of these sorts on every farm; or, in order more effectually to prevent mixture, to have one sort only on a farm. In the latter case, the cutting of that which ripens first, and so on, must be accomplished by the force of all the farms, instead of each doing its own work. If the seed on one farm was to be sown on another, especially if seed which grew on a light soil was to be sown on a stiff one; and that which grew on a stiff one, sown on light ground, advantages would unquestionably result from it.

11th. The potatoes at the mansion house must be worked by the ploughs from Union farm, and when this is required, it would be best, I conceive, to accomplish the work in a day.

12th. It is expected that the fences will be made secure, and no damage permitted within them by creatures of any kind or belonging to any body—mine any more than others.

13th. The greatest attention is to be paid to the stocks of all kinds on the farms; and the

most that can be made of their manure and litter. They are to be counted regularly, that no false reports may be made; and missing ones, if any, hunted for until found, or the manner of their going can be accounted for satisfactorily.

14th. A weekly report, as usual, is to be handed to Mr. Lewis. In this report, that I may know better how the work goes on, mention when you begin to plough, hoe, or otherwise work in a field, and, and when that field is finished. The increase, decrease and changes are to be noted as heretofore—and let me ask—

15th. Why are the corn harrows thrown aside, or so little used that I rarely of late ever see or hear of their being at work? I have been run to very considerable expense in providing these and other implements for my farms; and to my great mortification and injury, find, generally speaking, that wherever they were last used there they remain, if not stolen, till required again; by which means they, as well as the carts, receive so much injury from the wet weather and the heat of the sun as to be unfit for use: to repair or supply the place of which with new ones, my carpenters (who ought to be otherwise employed) are continually occupied in these jobs. Harrows, after the ground is well broken, would certainly weed and keep the corn clean with more ease than ploughs. I hope, therefore, they will be used. And it is my express order that the greatest care be taken of the tools of every kind, carts and plantation implements, in future—for I can no longer submit to the losses I am continually sustaining by neglect.

16th. There is nothing I more ardently desire, nor indeed is there any more essential to my permanent interest, than raising of live fences on proper ditches or banks; yet nothing has ever been, in a general way, more shamefully neglected or mismanaged; for instead of preparing the ground properly for the reception of the seed, and weeding and keeping the plants clean after they come up—the seeds are hardly scratched into the ground and are suffered to be smothered by the weeds and grass if they do come up: by which means the expense I have been at in purchasing and sending the seeds (generally from Philadelphia) together with the labor, such as it is, that has been incurred, is not only lost, but (and which is of infinite more importance to me) season after season passes away and I am as far from the accomplishment of my object as ever. I mention the matter thus fully to show how anxious I am that all these seeds which have been sown or planted on the banks of the ditches should be properly attended to; and the deficient spots made good if you have or can obtain the means for doing it.

17th. There is one thing I must caution you against (without knowing whether there be cause to charge you with it or not)—and that is not to retain any of my negroes who are able and fit to work in the crop, in or about your own house, for your own purposes. This I do not allow any overseer to do. A small boy or girl for the purpose of fetching wood or water, tending a child, or such like things, I do not object to; but so soon as they are able to work out I expect to reap the benefit of their labor myself.

18th. Though last mentioned, it is not of the least importance, because the peace and good government of the negroes depend upon it—and not less so my interest and your own reputation. I do, therefore, in explicit terms enjoin it upon you to remain constantly at home, (unless called off by unavoidable business or to attend Divine worship) and to be constantly with your people when there. There is no other sure way of getting work well done and quietly by negroes; for when an overlooker's back is turned the most of them will slight their work, or be idle altogether. In which case correction cannot retrieve either, but often produces evils which are worse than the disease. Nor is there any other mode but this to prevent thieving and other disorders, the consequence of opportunities. You will recollect that your time is paid for by me, and if I am deprived of it, it is worse even than robbing my purse, because it is also a breach of trust, which every honest man ought to hold most sacred. You have found me, and you will continue to find me faithful to my part of the agreement which was made with you, whilst you are attentive to your part; but it is to be remembered, that a breach on one side releases the obligation on the other. If, therefore, it shall be proved to me that you are absenting yourself from either the farm or the people without just cause, I shall hold myself no more bound to pay the wages than you do to attend strictly to the charge which is entrusted to you by one who has every disposition to be

Your friend and servant,

GEO. WASHINGTON.

AGRICULTURAL PREMIUMS.

The Editor of the "American Agriculturist," amongst some excellent advice, as to the manner of conducting agricultural exhibitions, remarks,

"We now come to a very important suggestion—it has been asserted that committees as heretofore formed, were little better than secret conclaves, whose reasons for their decisions were just as impenetrable as those of the Venetian Senate or Spanish Inquisition; and very many have consequently declined exhibiting, till they can publicly know by what principles their ani-

mals or manufactures are judged. For these reasons we would respectfully suggest, that on the second day of the exhibition, the chairman of each committee mount the rostrum, the animal or manufactured article be brought out before the public, and then the explanations for their decisions be set forth at large.

"We are free to assert, that there can never be any general fixed scientific improvements made till such a course is adopted; and if a member of any committee has not sufficient confidence in his knowledge and judgment, and the moral courage to proclaim the same publicly and his reasons therefor, he is undeserving a place on that committee. What a school would this be to the rising, and aye to much of the risen generation. A person might learn more by attending one such day's exhibition and explanation, than from studying books, and plates, and animals, unaided by the opinions of others, for a month.

"As awards are now managed, they become as variable as the wind. What was declared to be best yesterday, is denied to-day, and both subverted to-morrow; while, perhaps, on a fourth exhibition, the first may again come uppermost; and all this without the slightest enlightenment and explanation to the public. All, therefore, but the few who stand aloof with superior knowledge are at a loss, and left to grope in the dark, without chart or compass to steer by."

That the grounds of the award should be fully explained, there can be no manner of doubt, not only for the satisfaction of the competitors, but for the instruction that judicious comments may afford the spectators. But instead of "the chairman's mounting the rostrum" we would respectfully prefer the example set in the full and elaborate reports made in writing by the committees generally of the Agricultural Society of Henrico, and amongst these, we would point particularly to the report of the Farm Committee of 1841, which we esteem a model of that kind of writing.

For the Southern Planter.

BLIGHT AND RUST IN WHEAT.

Botanists have long known that the blight and rust in wheat are occasioned by the growth of minute parasitic fungi on the leaves, stems, and glumes of the living plant—though the question has been raised, whether they are not diseased parts of the structure on which they appear rather than the product of separate germs, but it is now generally admitted that they originate from distinct germs introduced from without. In order to show that this is probable, it is necessary to premise that the striped appearance of the surface of a straw, which may be seen with a common magnifying glass, is caused by alternate longitudinal partitions of the bark; the one imperforate and the other furnished with one or two rows of pores, or mouths, shut in dry, open in wet weather, and well calculated to imbibe fluid whenever the straw is damp. By these pores, which exist also on the leaves and glumes, it is presumed the seed of the fungi gain admission, and afterwards germinate and push their minute roots into the cellular texture beyond the bark, where they draw their nourishment by intercepting the sap that was intended for the nutriment of the grain. Sir Joseph Banks thinks that the leaf is first infected in the spring or early in the summer before the plant sends up its shoot of straw, and that the fungus is then of an orange color; and after the straw has become yellow the fungus assumes a deep chocolate brown: each individual is so small, that every pore on a straw will produce from twenty to forty fungi, and every one of these will at least produce an hundred seed: in this way a few diseased plants scattered through a field will soon infect a whole neighborhood. Sir Joseph thinks that a fungus will mature its seed in a week, so that by the latter end of summer from this prolific increase the air is loaded with seed, ready whenever a gentle breeze, accompanied with humidity, shall give the signal, to intrude themselves into the pores of thousands of acres.

Mr. Knight entertained the opinion, that so much water is, under particular circumstances, absorbed by the leaves that it produces a derangement of function to which he ascribes the attacks of mildew, fungi, upon plants. He supposed their attacks to depend upon the want of sufficient moisture from the soil, while there is an excess of humidity in the air. At a particular season if damp and cold weather succeeds that which has been warm and bright, the wheat crop is generally much injured by mildew. He suspects that in such cases an injurious absorption of moisture by the leaves and stems of the wheat plants takes place, by which a retrograde motion of the plant's fluids are produced, so that the ascent of the true rays or organizable matter contained in the seed vessels is retarded, and thus becomes the food of the parasitical fungi, which then only may grow luxuriant and injurious.

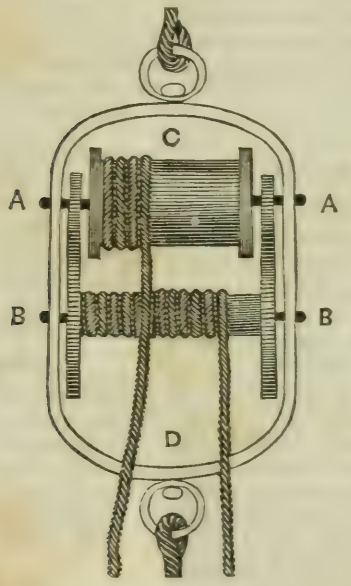
It has been long admitted by farmers that wheat in the neighborhood of a barberry bush seldom escapes the blight—and it is well known that near the village of Rollesly, in Norfolk, England, where barberry bushes abound wheat seldom escapes the blight—and it is well known to botanists that the leaves of the barberry are very subject to an attack of a yellew parasitic fungous, longer but not otherwise different from the rust in wheat. Sir Joseph Banks observes,

it may be well to remark, that although the seeds of wheat are rendered by the exhausting power of the fungus so lean and shrivelled that scarcely any flour fit for the manufacture of bread can be obtained by grinding them, these very seeds will answer the purpose of seed-corn as well as the fairest and plumpest sample that can be obtained, and in some respects, better; for a bushel of much nubbed corn will contain one-third at least more grains in number than a bushel of plump corn; so that three bushels of the one will go as far in seeding as four of the other. Eighty grains of the most blasted wheat of the year 1804 were sown in a pot and seventy-eight produced healthy plants. There are ten species of fungi described by botanists is attacking wheat, viz: Æcidium and Puccinia. Æcidium, sometimes known as the red gum—this species usually grows inside the glumes of the calyx, and when it bursts it emits a bright orange color, and is thought not to injure the grain materially. Puccinia—this attacks the stems and leaves of wheat principally—having at first an orange colored appearance, and then changes to a chocolate brown color, and is very hurtful to the quality of the grain of such plants as it infests.

The views of some of the most distinguished writers on the subject of Blight and Rust are submitted to the Editors of the Planter by their correspondent.

A NATURALIST.

HOISTING MACHINE.



The cut above is taken from the American Mechanic, and represents an apparatus admirably adapted for the hoisting of ponderous bodies. It is thus described. Two horizontal axles with pivots at the ends, A, A, and B, B, have their bearings in an iron strap which has an eye at C, at the top, and another D, at the bottom. On the axle A, is a drum, round which is coiled a small rope; and at each end of the drum is a small pinion. On the axle B, are two geer wheels, the teeth of which work in those of the pinions. Another rope is attached to this axle by one end, while the other end passes down and through a block with a single pulley, and up again to the eye D. Now we suppose the drum to be ten inches in diameter, and the pinions two inches; the geer wheels fourteen inches, and the axle D, two inches. Then a force of one pound being applied to the small drum rope, would be equal to five pounds on the teeth of the geer wheels, and thirty-five pounds on the rope of the axle D; and this force being doubled by the single pulley, would produce a force on the weight attached below, equal to seventy pounds. Thus one man alone would be able to hoist a weight of 7,000 lbs.

Although this simple and admirable fixture may appear to be more peculiarly valuable to the mechanic, the merchant, and the sailor, we have presented it to our agricultural readers because it has occurred to us that it might be advantageously used by them in constructing a machine for which at this time there is a great and growing demand in Virginia. We mean a Hay Press. How can a simpler or more efficient press be constructed than by means of this apparatus? Prepare a box of the usual form for the reception of the hay; let another box moving up on guides fit in it; fill this last with stones, or any heavy weight, until the required pressure is obtained. This box will, of course, be the weight attached to the pulley to be hoisted by the apparatus we have described, the power of which can be increased at pleasure. We have no doubt that the necessary pressure may be thus obtained with more facility and economy than by any other means we have ever seen employed. We should be glad if some of our farmers or mechanics would try the experiment, and apprize us of the result.

Red Hills, Aug. 20, 1842.

To the Editors of the Southern Planter:

Gentlemen,—Below you have for publication in the "Planter," a condensed report by a Committee of the "Albemarle Hole and Corner Club, No. 1," of experiments made by various members of the Club on the relative weight of wheat gathered in various stages of ripeness. It may be proper to remark that the greater weight of the wheat gathered in the dough state over that thoroughly ripe in the experiment made by Dr. F. Carr, in which respect his observation differs from those of the other experimenters, is probably owing to the fact that the wheat (thoroughly ripe) in his statement was taken from a shock in the field which had been exposed to much wet weather, and therefore was very damp.

Respectfully, &c.

FRANK CARR,
Cor. Sec'y, Albemarle Hole and Corner Club, No. 1.

ALBEMARLE HOLE AND CORNER CLUB, No. 1.

The Committee, to which the reports of Experiments on Wheat cut in different stages of ripeness were referred for the purpose of extracting the general results for publication, have discharged the duty, and make the following report:

All the experiments seem to the Committee to have been made with commendable care and accuracy: three parcels of wheat were cut in every case,—one in the *milk state*, that is, when the milk could be pressed in small quantities, and the straw under the head was still green. One in the *dough state*, that is, when the grain was tough, though still compressible between the finger and thumb, and the straw yellow—and one in the *ripe state*, that is, when the grain was hard, and the straw apparently dry. The samples of wheat were all cured in the shade; when rubbed out they exhibited the following results:

Experiment by Daniel F. Carr.

The same measure containing,
Of ripe wheat 462 grains, weighed 252 grains, Apoth. weight.
Of dough wheat 499 grains, weighed 258 grains, Apoth. weight.
Of milk wheat 623 grains, weighed 241 grains, Apoth. weight.

Experiment by Dr. Frank Carr.

The same measure containing
Of ripe wheat 827 grains, weighed 8 drachms 17 grains.
Of dough wheat 874 grains, weighed 8 drachms 20 grains.
Of milk wheat 1000 grains, weighed 8 drachms 3 grains.

Experiment by William W. Minor.

The same measure containing
Of ripe wheat 35 grains, weighed 24½ grains, Apoth. weight.
Of dough wheat 45 grains, weighed 24 grains, Apoth. weight.
Of milk wheat 45 grains, weighed 22 grains, Apoth. weight.

Experiment by Richmond Terrell.

The same measure containing
Of ripe wheat 58 grains, weighed 35 grains, Apoth. weight.
Of dough wheat 60 grains, weighed 33 grains, Apoth. weight.
Of milk wheat 79 grains, weighed 31 grains, Apoth. weight.

Experiment by Hugh Minor.

A measure of *ripe wheat* containing 387 grains of wheat, balanced exactly, the same measure containing 415 grains of wheat in the *dough state*—and the same measure containing 559 grains of wheat in the *milk state*, required 66 grains more to make it balance the other samples.

Taking the *ripe wheat* as the standard, the Committee conclude from the foregoing experiments, that the loss by cutting wheat in the *dough state* is between 5 and 8 per cent. and the loss by cutting wheat in the *milk state* is between 40 and 50 per cent.

Notwithstanding the result of these experiments clearly prove the advantage of cutting wheat ripe, yet the Committee respectfully sug-

gest the opinion that it would be better to begin to cut a crop of wheat in the *dough state*, than to wait until it gets *fully ripe*; inasmuch as the loss and labor are both greater in cutting ripe wheat, and the risk to the crop from storms and other causes is also considerably increased by letting it stand to get ripe. All these certain and contingent losses this Committee estimates at more than 8 per cent. while the loss from cutting in the dough state ranges from 5 to 8 per cent, supposing that the entire crop were cut in that condition—but in truth, by beginning to cut a crop of wheat in the dough state, at least one-half the crop would necessarily be cut in the ripe state, so that the loss would be only $2\frac{1}{2}$ to 4 per cent.—a loss so trifling as fully to warrant the Committee in the expression of opinion they have made.

All which is respectfully submitted to the Club.

HUGH MINOR,
FRANKLIN T. MINOR,
WM. W. MINOR,
Committee.

August, 1842.

TOBACCO.

Some curious and interesting facts elucidating the chronological history of this valuable plant, published in the Northern Light, have been copied into the congressional document to which we have already referred. We make the following extracts:

CHRONOLOGY AND STATISTICS OF TOBACCO.

BY JOEL MUNSELL.

In 1496, Romanus Pano, a Spanish monk, whom Columbus on his second departure from America had left in that country, published the first account of tobacco, with which he became acquainted in St. Domingo. He gave it the name of *cohoba*, *cohabba*, *givia*.

In 1519, tobacco is said to have been discovered by the Spaniards near Tobasco, though it is assigned to the next year.

In 1535, the negroes had already habituated themselves to the use of it, and cultivated it on the plantations of their masters. Europeans likewise already smoked it. We also find a passage in Cartier's Voyage, that it was used in Canada.

In 1559, tobacco was introduced into Europe from St. Domingo by a Spanish gentleman named Hernandez de Toledo, who brought a small quantity into Spain and Portugal. In the same year, Jean Nicot, envoy from the court of France to Portugal, first transmitted thence to Paris, to Queen Catharine de Medicis, seeds of the tobacco plant; and from this circumstance it acquired the name of *Nicotiana*.

In 1565, Conrad Gesner became acquainted with tobacco. At that time several botanists cultivated it in their gardens. The same year Sir John Hawkins carried tobacco from Florida to England, where "all men wondered what it meant."

In 1570, they smoked in Holland out of conical tubes, composed of palm leaves, plaited together.

In 1575, first appeared a figure of the plant in Andre Therot's *Cosmographie*.

In 1585, the English first saw pipes made of clay among the natives of Virginia, which had just been discovered by Sir Richard Grenville. It appears likewise that the English soon after fabricated the first clay tobacco pipes in Europe.

In the beginning of the seventeenth century, they began to cultivate tobacco in the East Indies.

In 1604, James I. of England endeavored, by means of heavy imposts, to abolish the use of tobacco, which he held to be a noxious weed.

In 1610, the smoking of tobacco was known at Constantinople.

In 1615, tobacco began to be sown about Amesfut, in Holland, which afterwards became famous for its cultivation.

In 1616, the colonists began to cultivate tobacco in Virginia. It is not known whether the plant was indigenous, or whether it came from a more southern country. It is supposed the seeds were from Tobago. But it seems to have been in use among the Virginia Indians at the time they were visited by the English, and was called by them *petun* or *petum*. Clarigero says "tobacco is a name taken from the Haitino language."

In 1619, James I. wrote his *counterblast to tobacco*, and ordered that no planter in Virginia should cultivate more than one hundred pounds a year. He also prohibited its sale in England or Ireland until the custom should be paid and the royal seal affixed. *Twenty thousand pounds* were exported this year from Virginia to England, the whole crop of the preceding year.

In 1620, ninety young women were sent over from England to America, and sold to the planters for tobacco, at *one hundred and twenty pounds each*.

In 1622, the annual import of tobacco into England from America for the last seven years, was 142,058 pounds.

In 1639, the Grand Assembly of Virginia passed a law, that all tobacco planted in that and the two succeeding years should be destroyed, except such a proportion to each planter as should make in the whole 120,000 pounds, and that the creditors of the planters should receive 40 pounds for every 100 pounds due them.

In 1653, smoking began in the canton of Appenzel, in Switzerland.

In 1690, Pope Innocent XII. excommunicated

all who should be guilty of taking snuff or tobacco in the church of St. Peter, at Rome.

In 1709, the yearly exports of tobacco from America, for the last ten years, were 28,858,666 pounds; of which 11,260,659 pounds were annually consumed in Great Britain, and 17,598,007 pounds in the countries of Europe.

In 1719, the Senate of Strasburg prohibited the culture of tobacco, from an apprehension that it would diminish the growing of corn.

In 1724, Pope Benedict XIV. revoked the bull of excommunication published by Innocent.

In 1732, tobacco was made a legal tender in Maryland, at one penny a pound.

In 1747, and the two years previous, there were annually exported to England from the American colonies 40,000,000 pounds of tobacco, 7,000,000 of which were consumed in England. The annual revenue was about 4,500,000 dollars.

In 1775, the annual export of tobacco from the United States, for the last four years, was *one million pounds*; for the last thirty years, it averaged 40,000,000 pounds. Of the total seven years exportation, 33,974,949 pounds were captured by the British.

In 1789, the quantity exported from the U. States, together with the two previous years, averaged about 90,000,000 pounds.

In 1820, the quantity of tobacco grown in France had doubled in three years, being 32,887,500 pounds.

In 1828, the revenue on tobacco in the State of Maryland was $27,275.

In 1830, the revenue on tobacco and snuff in Great Britain was nearly $13,000,000.

In 1834, the value of tobacco used in the United States was estimated at $16,000,000, of which $9,000,000 were supposed to have been for smoking Spanish cigars, $6,500,000 for smoking American tobacco and chewing, and $500,000 for snuff.

In 1838, the annual consumption of tobacco in the United States was estimated at *one hundred million pounds*, valued at *twenty million dollars* cost to the consumers, being seven pounds to each individual of the whole population.

In 1840, it was ascertained by a committee, appointed to procure and report statistical information on the subject, that about *one million five hundred thousand* persons were engaged in the manufacture and cultivation of tobacco in the United States, one million of whom were in the States of Virginia, Maryland, Kentucky, and Missouri. Allowing the population of the whole country to be seventeen millions, it will be seen that nearly *one-tenth* are in some way engaged in the cultivation or manufacture of this article. The value of the export during that year was nearly $10,000,000.

Albany, September, 1841.

WHEEL CARRIAGES.

Doubts are entertained whether, in the improved state of our roads, the *dishing* of wheels is not highly objectionable. The greatest strength is undoubtedly obtained by having the spoke perpendicularly under the weight; on a level surface this would be obtained by a flat or level wheel, with the felloes in the same plane with the spokes, and with a straight axle; but it was imagined that from the inequalities of the ground, the axle was oftener inclined than level, and when one side is lowest the weight coming upon it, the spoke is placed at right angles under it by the dishing of the wheel. Much even of the doubtful advantages of dishing, it will be seen then, depends upon the liability of the axle to be thrown out of level. But the uncertain advantages of this form are more than counterbalanced by the indubitable increase of friction derived from it. The wheel, instead of being disposed of itself to run forward in a straight line, as it would be if cylindrical, is thus converted into a frustrum of a cone, and if left to itself, when rolled forward would describe a circle round a point which would be the apex of the cone if complete. Hence, there would be a constant tendency to rub against the lynch-pin, which is obviated, without decreasing the friction, by the bending forward of the axle, called the *gather*, whereby the fore part of the wheels are thrown nearer together than the back.

But the most objectionable form of all is that, wherein the wheel is dished, but the axle is bent downwards, so as to bring the lower spokes perpendicularly under the axle. Here, you have all the friction of the dished wheel, without any of the advantages of the inclined position of the spoke when the carriage falls into a rut. Indeed, it is but making one evil to remedy another, and by means of the two to bring you back to the point from which you started. As to the appearance, no one can doubt that our preference for dished wheels is entirely the effect of custom, and if some of our amateur coachmen would lend their aid to the introduction of level wheels, *Fashion* would soon render them pleasing, and her potent ladyship, for once in her life, might boast of having rendered herself useful.

PATENT MANURE.

We alluded rather jocosely in a former number to the pretensions of a Mr. Bommer, of Con-

necticut, to the discovery of a process, by which, for a mere song, manure of the best quality was to be made of any thing and every thing. The following extracts from Mr. Bommer's circular will interest even those whose late experience has rendered them a little wary of grand schemes for sudden riches. The truth is, the day is so rife with humbug, that even a good thing, if it pretends to too much, is looked on with suspicion, but we should remember that an excess of scepticism is not less dangerous than an undue degree of credulity.

"A new invention has been made to produce as much manure as we may please in fifteen days without any cattle, a manure, as rich as farm manure, and more lasting, and at very little cost; by which also is made earth manure, to be used as a substitute for common manure and compost; by which farmers are taught the means of increasing considerably stable and yard manure, and the method of preparing manure of different degrees of strength, and dressing for early garden produce. This method, teaching the whole art of making and preparing manure for use, holds decidedly the most important place in the system of agricultural economy!

"This invention is the fruit of many years of exertion and chemical labor, and the result of repeated and various experiments.

"The secret of the invention to make the manure is accurately described and specified in my method secured by patent. The preparation of said manure is very simple and easy, and every farmer by following my method can exactly count upon certain success.

"This manure is a composition of animal, mineral, and vegetable substances, consequently designed by nature for their nutriment.

"We may, therefore, abandon, for the future, the partial use and application of every kind of merely stimulating manure, such as lime, plaster of Paris, ashes, &c. the more readily, as these stimulants are not only expensive, but when employed alone they draw all vegetable moisture from the soil by their corrosive heat, and sooner or later make the ground entirely barren. This is a truth which all enlightened farmers will readily admit.

"The merit of my method essentially consists in the four following important points:

"1. In being able to reduce in a short time all kinds of straw and ligneous weeds to a rich, nutritious and durable manure, such as wheat straw, barley, rye, buckwheat, and other black grains; stalks of Indian corn, rice, and other plants; dried or green potato tops, leaves, stalks, and roots of all kind of plants; green or dried reeds, green rushes, sea weeds, sea rushes, heather broom, stubble; in fact, every thing belonging to the vegetable kingdom, and a great many other things lying about farms which are often allowed to go to waste. Even the ground itself may be converted into the best manure, or compost.

"2. In the combination or alliance of fecundating substances, the use of which when separated, would not and could not produce the desired effect.

"3. In the production of a considerable quantity of factitious water, which, when combined with other ingredients, forming lees, furnishes the farmer with a fertilizing liquid, the commixture of which in either vegetable or mineral substances, gives a manure of the richest kind.

"4. In the production of a quantity of nitrate of lime and caustic potash; of ammonia and saltpetre—four substances which modern chemistry has found to contain the most fecundating properties possible.

"From all this it is clear that my method employed on farms offers the following advantages:

"1. That those who have straw will be able to change the same into manure immediately after the crop is housed, or at any required time. Those who have not straw may use any green or dry substance instead, and that those who have neither straw or the substances above mentioned, may change the very soil itself into a very good earth manure, and in any spot they may choose.

"2. That a farmer can make with the greatest ease, in a few days, earth manure, or compost which will answer all the purposes of animal manure, and excel in their fecundating properties all other ordinary composts, which by other means can be had hardly in one year, more frequently only in three years. That this earth manure may be used in the spring to quicken the growth of seed that has suffered from the rigors of the winter; to manure wheat previously sown without manure; it will be a great benefit in planting Indian corn; for top-dressing of artificial and other meadows; it is the greatest use in gardens, mulberry and other fruit trees, keeping at once the ground moist, and producing rapid vegetation.

"3. That the farmer will have the advantage of being able to make his manure heaps when, where, and as he pleases; he will be able to open them when they are in the best state without losing any of the fecundating moisture.

"4. By means of the lees, which this method will inform him how to make, it will be easy for him to give to his farm-yard manure more invigorating properties, and he may increase its bulk at pleasure. Farm-yard manure, in fact, should be used only as the leaven to make the different heaps required.

"5. By the great quantity of moisture entering into the materials, the weight of such of

them as are dry, will be increased fourfold; that of the others is more than doubled.

"6. This method enables the farmer to connect entirely his manure heaps, that is to say, he will be able to make them in all their parts equally good and fertilizing. The lees, which distribute the saline and soluble particles in a regular and uniform manner, will produce an even crop throughout the field.

"7. By the high degree of heat to which in that course of making it attains, the germinating power of all weeds found the materials thus submitted to decomposition will be utterly destroyed. Hence manure made after this method never reproduces weeds.

"8. The farmer will also be able to graduate his manure. He may have it of any degree of strength he wishes. This will enable him to forward the growth of plants in a manner hitherto unknown.

"9. By means of manure thus graduated at will, market gardeners will have their produce much earlier in the market than heretofore.—They will be able also to heat their hot beds anew by means of the lees without distributing the frames.

"10. In fine, the lees by which the manure is made are prepared cold, and without any previous chemical preparation; the majority of the ingredients may be found at hand on almost every farm, and cost nothing; and water which is the basis of the system, is of no more expense. All here concur to render the method truly economical. Such are the principal grounds on which the system is recommended.

"My method rests solely upon facts which are the results of numerous experiments. I have explained it in simple terms, without making use of any technical expressions; it is as easy to understand as to put in practice. Thus clearly and simply detailed I present it to the public, having proved by repeated public experiments in presence of enlightened farmers, that all I have said is true, and that the advantages to be derived from its adoption are real, and not visionary.

"Therefore, agents, having all due authorization, and furnished with printed copies of the method, have been appointed in all the principal towns in each State. These agents will deliver a copy to each purchaser, on his declaring the name, residence, and extent of cleared land.

"To facilitate the purchase of the method, the price is fixed at the following moderate rates:

"Cleared land, intended for agricultural purposes, (wood land excepted,) under thirty acres, $8; more than thirty, ten cents per acre additional. On payment of this sum the method becomes the property of the purchaser for ever.

"The following commendatory notice of this valuable discovery is from Professor Eli Ives, M. D. one of the Vice-Presidents of the United States Agricultural Society:

"Rev. E. Barnett: *Sir*,—I have examined the pamphlet of Mr. Bommer on the subject of manufacturing. His method is founded on correct philosophical principles, agreeable to those recently advanced by Leibig. If the farmers can be induced to purchase the right and thoroughly execute his plan of making manure, in my opinion, it will very much increase the value of the farms in the State of Connecticut."

For the Southern Planter.

TOBACCO.

I noticed in the two last numbers of the Planter some reports and observations on the subject of tobacco, which, to my view, seem a a little defective. I design briefly and in a condensed manner to supply one important omission only at this time. As the time approaches for putting the knife to the crop, my observations will be confined to the operation of cutting and the flavor. The most common arrangement is cutting and housing, but as flavor depends upon the time of putting the knife to the plant, I have united them, as no one quality is more essential to tobacco than a good fine flavor. One of the greatest errors in the management of this crop consists in cutting it prematurely. Premature cutting is, if I may so express it, a *radical* defect, which no subsequent management can supply or remedy; as all tobacco cut before it is fully ripe, will be defective in flavor, color, and weight; and I believe that from twenty to thirty per cent. is generally lost on this crop from want of attention to this single point. I maintain, that no principle is better established than that a dull, dingy hue will inevitably be the aspect of all that is cut green, cure it as you may, and that much of the substance, as well as weight, will thereby be lost; and that any rich plant cut in perfection, fully ripe, no matter on what soil it is grown, may be cured of good color and flavor, that will be lasting.

A gentleman of my acquaintance, twelve or thirteen years ago, subjected himself and a piece of ground to my control and instruction in the cultivation and management of a crop of tobacco. He had ceased to cultivate the plant for some years before, his bad success in the first instance having lead him to abandon its culture. The Blue Prior was chosen, as being less subject to those defects while growing, the offspring of unpropitious seasons, than any other kind of tobacco with which I was acquainted. The crop was permitted to remain in the field until it was fully matured. My engagements not permitting me to see the crop about this time, my instructions were that the knife should not be put to the plants until ten days had elapsed after he considered the crop ready for cutting

When exposed in market, it very readily commanded ten dollars per cwt. In what manner is this simple unsophisticated fact to be explained? The gentleman had no confidence in his own skill in the management of tobacco, but by permitting it to mature fully, he sells readily at greatly more than the average market price. The true secret of the whole matter is comprised in the simple fact, that the crop was permitted to mature fully, the soil was good, and this was the one thing needful to insure all the rest, and to supply any deficiencies or errors in other respects.

As many planters have very indefinite ideas on the subject of ripe tobacco, I will give a criterion by which they may be governed. Let the yellow spots which first appear on the upper side of the leaf be fully visible on the under side. This appearance will rarely deceive them in the Blue Prior, and indicates the plant in its highest state of perfection. When your plants are fully ripe, always cut before a rain. Tobacco is an aromatic plant, and is composed of the richest, strongest, and most delicious ingredients, as well as the most delicate and volatile; all of which lie on the upper side of the leaf, and are liable to be washed off and destroyed by rain, and if the growing season is far advanced, the plants never recover these qualities. By this process, the alcohol, the oil, the sugar, the mucilaginous wax and gums, the acids, and nitre, with all the volatile salts, are protected and retained.

The next process in order is that of firing, curing, or more properly *drying*. Such a degree of heat only is required as to throw off the watery particles of the plants, without causing any action among its chemical properties, whereby a decomposition would be effected and all the valuable and volatile substances cast off. Excessive firing destroys the elasticity of the leaf, and makes it crisp. There is a rule which I have found to apply very well in drying. I increase the temperature of my barns ten degrees every four hours, until the leaf is dry. The curing has always been pronounced to be perfect.

I have already written more than I intended or promised I would do, so I cannot at this time enter into further details.

G.

Wylliesburg, Charlotte.

We are sorry we did not receive the above in time for our last number, when it would have been more in season. However, it is never too late to do good. We have no personal acquaintance with our correspondent, but, knowing his real name, we learn he is one of the most experienced and successful planters in the celebrated county of Charlotte. We shall be much obliged to him to furnish us any "further details."

For the Southern Planter.

DISTEMPER IN DOGS.

Messrs. Editors,—I believe that it would be gratifying to many of your readers, who are lovers of the sports of the field, to know a certain cure for that dreadful malady in young pointers and setters, commonly called *distemper*. I have frequently tried it, and have never failed of a cure in a single instance, where the puppy was strictly attended to.

As soon as the animal is discovered to be sick, give it a table spoonful of table salt forced down its throat, holding the mouth together until the animal has swallowed it—turn him loose, and watch him closely, and if he does not vomit in twenty minutes, repeat the dose until he does; let him rest from the exertions half an hour, and then burn under his nose tar, feathers, and a small quantity of brimstone, until a running at the nose is discovered. Repeat the dose of salt every morning, and the smoking three times a day until a cure is effected. I have raised many valuable dogs, and have had the distemper among them often, and have never yet lost one.

Yours, very respectfully,

A Venator.

KEEPING EGGS.

The following is an extract from a letter published in the Cultivator. We have seen the plan frequently recommended before, and call the reader's attention to it at this time particularly, because the present low price of eggs affords a fair opportunity for trying it.

"Having tried many ways of preserving eggs, I have found the following to be the easiest, cheapest, surest and best. Take your crock, keg or barrel, according to the quantity you have, cover the bottom with half an inch of fine salt, and set your eggs in it close together on the *small end*; be very particular to put the *small end down*, for if put in any other position, they will not keep as well, and the yelk will adhere to the shell; sprinkle them over with salt so as to fill the interstices, and then put in another layer of eggs, and cover with salt, and so on till your vessel is filled. Cover it over tight and put it where it will not freeze, and the eggs will keep perfectly fresh and good any desirable length of time. My family have kept them in this manner three years, and found them all as good as when laid down. I believe we have never had a bad egg since we commenced preserving them in this manner. The trouble is comparatively nothing, for when we have a dozen or so more than we wish to use, we put them in the cask and sprinkle them over with salt; and when at any future time we wish to

take them out, they are accessible and the salt is uninjured. But mark! the eggs should be put down before they become stale, say within a week or ten days after they are laid.

"Every man by this process may have eggs as plenty in winter as in summer; and farmers who make a business of selling their eggs, may easily calculate the profits of preserving them in summer and selling them in winter. Eggs where I live, sell frequently in summer at eight cents, and in winter as high as thirty-seven and a half cents per dozen. In view of these various considerations it must be evident that no investment that a farmer can make, will yield so great a profit as a few dollars in domestic fowls. They will cost, probably in no case, more than fifty cents each per year for their food; the trouble of taking care of them is fully counterbalanced by the pleasure they give; and they will or may be made to produce each on an average, from 200 to 250 eggs, besides an occasional brood of chickens.

"The theory of your correspondent B. in your March number respecting *animal* food being necessary to the production of eggs, does not correspond with my observation of facts. I have for years been obliged to shut up my fowls during most of the summer, where they could neither get insects nor any kind of animal food, and yet they continued to lay as much as any I have ever known to run at large.

"The banishment of cocks too, which he recommends, I have tried, and abandoned it as unnatural and worse than useless; for with a good attendance of the male, say one to six in summer, and one to four or five in winter, I have always found the hens to be most profitable.

H. A. P.

Buffalo, March, 1842."

BUG WASH.

Dr. Feuchtwanger is, we believe, a great man; we therefore copy the following from the American Agriculturist:

"The following preparation will effectually exterminate all caterpillars, snails, bugs, beetles, earth fleas, leaf lice, ants and other insects on fields, trees, bushes, and hedges:

"Take diluted Pyroligneous acid, one gallon; white oak bark, one pound; urine, half gallon; garlic, half pound. After soaking the oak bark and garlic for two days in the acid and urine, strain them off and sprinkle once a week or oftener, the trees infected with insects, or the pea, cabbage, &c. and they will be preserved for the season.

"This fluid has proved very successful in the experiments made by

Dr. Lewis Feuchtwanger.

New York, April 20, 1842."

POTATO.

The introduction of this valuable root to the gardens and tables of the people received for more than two centuries an unexampled opposition from vulgar prejudice which all the philosophy of the age was unable to dissipate until Louis XV. of France wore a bunch of the flowers of the potato in the midst of his court on a day of festivity: the people then for the first time obsequiously acknowledged its usefulness, and its cultivation as an article of food soon became universal.

GRAFTING.

Some of our most beautiful forest trees, as the holly, the hickory, &c. are most difficult to transplant. It has sometimes occurred to us that country gentlemen, desiring to domesticate these noble ornaments of the forest, might amuse themselves by making experiments in grafting them upon stocks more readily removed. We have been induced to call their attention to the subject, by meeting with the following paragraph, communicated to a southern paper by Mr. Scott, of South Carolina:

"This season I grafted the different species of lilac on the common ash, in accordance with some information I received from a friend, (Mr. Wolff, Jr.) while I lived in Paris. I do not recollect to have seen any account of any one having tried the same in this country. We have grafted about three dozen ashes, varying from four feet to ten feet in height, with the common and Persian lilac; and I am happy to say that the result has exceeded my most sanguine expectations; for we have grown about twenty-five healthy plants, with branches from one foot to eighteen inches long, which I hope in another year will be covered with bloom. They were grafted in April, after the lilacs had made considerable shoots. I would, therefore, advise that the scions be taken off in January or February, in order to retard their vegetating too soon for the stocks. Would not the pendulous ash form a beautiful object by having its branches grafted with Persian lilac?"

NECESSITY OF ECONOMY.

There have been few years in which the necessity of economy in the farmer, and general prudence in the management of his affairs, has been more apparent, than the present. The low price of produce, and small decline in the price of labor; the difficulty with which remunerating sales are made of animals and farm

crops, and the general firmness of price in the articles he is compelled to purchase; all indicate the propriety of paying particular attention to his income and his expenditures. This is particularly the case with him who is in debt; or who having little in advance, is dependant on the annual proceeds of his farm, and his labor, for support. There are a few classes that the pressure of the times, the price of produce, or the scarcity of cash, scarcely reaches. They are those who subsist on the fees of office, or the interest of their money. Such do not stand in need of lessons of economy.

But it is well for all to remember, that there is a wide difference between economy and parsimony; between prudence and covetousness. If reform in expenditure is proper, the farmer should see that it falls on those things which are least essential to his present or future prosperity. It would be the height of folly to commence a system of curtailment by dispensing with any of the necessary implements of the farm; the want of these, would certainly produce the evil he designs to avoid. Equally erroneous would he be were his retrenchment to fall on any of those things necessary to enlarge and inform the mind; and thus promote the intelligence, respectability, and consequent happiness of himself and family. Far better would it be to dispense with a new coat, than with the means of instruction; to forego the dainties or luxuries of the table, than to starve the mind. The importance of this point cannot be too strongly urged on the mind of the farmer; or the truth too forcibly or frequently impressed, that economy, or we should rather say parsimony, here, is a serious crime, and the means of inflicting irreparable injury. So too, if the farmer concludes to have little to do with his mechanics, when he requires the product of their skill, and is able to reward their labor, he is indirectly injuring himself, and positively injuring them. He is compelling them to forsake their work benches, or their anvils, and commence farmers, a result which would have a tendency directly, by increasing the quantity of produce thrown into the market, to reduce the price of his own, and thus injure himself. Besides, the mechanic cannot be dispensed with by the farmer, and the soundest dictates of economy would demand that he should receive the encouragement and support, his merits and his wants require; or his services, when most wanted, may not be within reach, or available. It is not in these and similar things, that economy should be begun; but let the farmer, when he is tempted to purchase any thing, ask whether it is necessary to possess it; and if he will further make it a rule to invariably pay down for what he purchases, he will be astonished at the aid it will give him in becoming properly economical.—Thousands of farmers have been ruined by having such excellent credits. A man's credit is in some respects like his stomach; neither can be overloaded or overtasked with safety; and the surest sign they are in a healthy condition, is when their functions are performed without his cognizance or attention.—*Cultivator.*

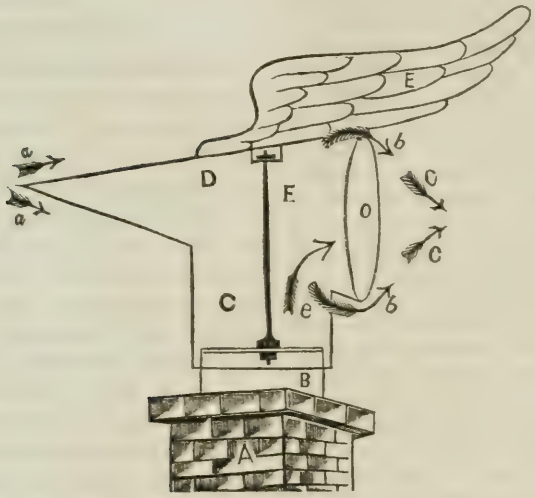
The Troy papers state that Mr. Burden, the ingenious worker of iron in that city has invented and successfully applied machinery to the fabrication of horse shoes. A bar of iron is put into the machinery, which converts it rapidly into well fashioned horse shoes, punched with nail holes, and ready to be put on.

SOUTHERN PRODUCTS.

A great many baneful errors have prevailed with respect to the capabilities of our climate and soil that are daily fading before the light of experience and a better system of husbandry. Amongst these we reckon the idea formerly very prevalent, that our climate was too hot to grow hay, that it would burn, and that we must depend upon the North for this great article of animal consumption. The truth is the greater attention of the northern farmer to the lesser crops has been followed with a success that had induced the belief, that we could grow nothing but wheat and tobacco, rice and cotton, in the South. Those great staples have engrossed too much of our attention—they have appropriated our best lands, and secured our entire care; whilst the hay crop, the most profitable that is made, has been neglected, with the unauthorised presumption, that the climate was unsuitable, the ever ready excuse for bad husbandry. It is a little remarkable, that as our lands became more and more worn, the climate became unsuited to a greater number of crops, until we had begun to believe that the generous products of nature were confined to the frigid regions of the North. But as necessity drives us to a better system of cultivation, it is astonishing to find how much better the *climate* is adapted to vegetable growth. Strange to tell, in the sunny fields of the South, where we have but a glimpse of the chilling storms of winter, we are beginning to raise fruits *almost* equal to those that are matured by the glimmerings of sunshine that illumine the miserably curtailed summer of the North. We have even seen Irish potatoes sold in the Richmond market fully equal to any that are exhibited in Boston, and our poor taste has confirmed us in the opinion expressed by naturalists generally, that it is to the glowing regions

of the South that we are to look for highly flavored fruit. Let us make our lands rich and cultivate them carefully and we may trust to our climate, inferior to none in the world, to do its part. We have formerly expressed the opinion that rich land is the best antidote to all the evils to which the wheat crop is subject: we will here add that we know a gentleman who has four lots of ten acres each, made extremely rich, from one of which he never fails to raise a splendid growth of wheat in defiance of the casualties to which the balance of his crop may be subjected.

ESPY'S VENTILATOR.



We present above, a sectional view of Mr. Espy's Invention for ventilating Ships, Hospitals, Prisons, Mines, Cisterns, Vats, Sinks, &c.—also for producing a strong draft in Chimnies, flues of Steamboats, Locomotives, &c.

DESCRIPTION.—A, denotes the chimney. B, a sheet iron pipe secured upon the top of the chimney. C, a collar of sheet iron fitting loosely over the pipe B. D, a hollow cone, also made of sheet iron, into which the collar C, enters. E, a vane, to keep the cone pointed to the wind. F, a perpendicular iron rod, on which the cone and collar revolve. *a*, *a*, *b*, *b*, *c*, *c*, and *e*, arrows showing the course of the current of air.

Now suppose the wind to blow in the direction of the arrows *a*, *a*,—it will pass along the surface of the cone to its base, when it will converge as represented by arrows *b*, *b*, and *c*, *c*, and produce a vacuum at O, the open end of the cone, thereby causing a strong current of air to rush up the chimney A, in the direction of the arrow *e*.

This apparatus is, we believe, perfectly adapted to effect the object for which it is intended, and may be invaluable to such of our readers as are afflicted with that greatest of human evils a smoking chimney. The inventor deserves almost as much of mankind as if he had freed them from its usual concomitant, a scolding wife; though that Mr. Espy is that inventor, we are not so clear for an apparatus, exactly similar in principle to the one described, has been, to our certain knowledge, revolving round an old chimney top in Richmond for the last twenty years. At any rate, it is simple and cheap, and no one hereafter should complain of a smoking chimney.

DIGESTIBILITY OF FOOD.

In the course of some experiments on a young Canadian's stomach, by Dr. Beaumont, the following facts in regard to the digestibility of various articles of food were ascertained:

Farinacea.—Rice, boiled soft, was digested in one hour; sago, an hour and three-quarters. Tapioca and barley, two hours. Bread, fresh, three hours; stale two.

Vegetables.—Potatoes, roasted, two hours and a half; boiled, three hours. Parsnips and beans, two hours and a half. Carrots, boiled, three hours and a quarter. Cabbage, raw, two hours—vinegar much assists in digestion. Beets, three hours and three-quarters.

Fruits.—Apples, sweet and ripe, one hour and a half; mellow, two hours; hard and sour, nearly three. A mellow peach, an hour and a half.

Fish and Shellfish.—Trout, boiled or fried, one hour and a half. Codfish, cured and boiled, two hours. Oysters, undressed, nearly three hours; roasted, three hours and a quarter; stewed, three hours and a half. Salmon, salted and boiled, four hours.

Poultry.—Turkey, roasted, two hours and a half; boiled, five minutes more. Chickens, fricasseed, two hours and three-quarters. Wild goose, roasted, two hours and a half. Fowls, boiled or roasted, four hours. Roasted ducks, four hours; and, if wild, half an hour more.

Butcher's Meat.—Soused tripe, pig's feet, boiled or fried, one hour. Venison steak, boiled, one hour and thirty-five minutes. Liver, calf's or lamb's, two hours. Sucking pig, two hours and a half. Mutton, broiled or boiled, three hours; roasted, a quarter more. Beef, fresh, boiled or roasted, three hours; lightly salted and boiled, thirty-six minutes more—old hard, salted, four hours and a quarter. Pork steak, boiled, three hours and a quarter; stewed, three hours; lately salted and boiled, four hours and a half; roasted, five hours and a quarter. Veal, boiled, four hours—fried, half an hour more.

Eggs.—Raw, two hours; roasted, a quarter more; soft boiled, three hours; hard boiled or fried, half an hour longer.

Milk.—Two hours. Custard, baked, two hours and three quarters. Butter and cheese, three hours and a half. Apple dumplings, three hours. Suet, four hours and a half. Oil, somewhat longer. Calves-foot jelly, half an hour.

It will be seen that of farinaceous substances, rice is digested more easily, and old bread more rapidly than new; and that oily food is particularly indigestible.

BLUE INK.

Dissolve one ounce of gum arabic in a pint of water. In a part of this gum-water, grind a small quantity of Prussian blue; you may thus bring it to any depth of color you choose. Indigo will answer this purpose very well, but it is not so fine a color, nor will it remain suspended so uniformly in the water.

COLIC.

Under this head we have chosen to place the following extract from the valuable report forwarded to us by Dr. Harrison, of Prince George. We know, by experience, the value of laudanum as a remedy for the violent pain to which the horse is subjected under the common name of colic. We have never known it fail to afford temporary relief which would be rendered permanent by the action of oil, or any gentle purgative.

We hope Dr. Harrison will not forget his promise of continued contributions to the Planter.

"Our animals generally are exempt from epidemic diseases of a fatal character, and our knowledge of the other diseases are so limited that their description and treatment would possess but little interest; but we would take this occasion to declare the convictions of our mind that too little attention is paid to veterinary practice. Frequently fine animals are lost from sheer ignorance on our part. The most prevalent disease, and at the same time the most distressing and fatal, to which that noble and valuable animal, the horse, is subject, is colic. It is produced from indigestion, impropriety either in the quantity or quality of food, over exertion, hard rides, suddenly cooling when over heated, large draughts of cold water when very warm, and other irregularities. This and its kindred affections of recent origin is manifested by restlessness, rolling over, lying down, turning up the nose, or the head to the side, abdominal distension, loss of appetite, and sometimes flatulence. A variety of remedies are in general use for the cure of this disease, and each practitioner has his favorite remedy. An ounce or two table spoonsful of laudanum has invariably succeeded in our hands. This remedy has been productive of such salutary effects, that we are almost induced to pronounce it a specific for colic and other spasmodic affections suddenly introduced. Our mode of administering this remedy is somewhat peculiar. It is first combined with a pint of water, poured into a bottle, the horse's head is elevated, the neck and mouth of the bottle is introduced into one of his nostrils, and the remedy is administered with a great deal of facility and in a much shorter time than is customary.

"The above remedy has frequently succeeded after the ineffectual exhibition of other remedies, and in one instance when a prepossession existed against the remedy, it was stubbornly opposed, and only recurred to, as a dernier resort, but with its accustomed success. This remedy operates, and its action is based upon, true physiological grounds, for its action is twofold, both acting as an anodyne and anti-spasmodic, which effects being produced, the disease is overcome. If constipation should succeed, it may be easily overcome by any of the neutral salts.

"The above course of treatment is only applicable to the primary form of the disease, and that immediately after its occurrence, but when

the disease has existed for some time, and fever and its attendant symptoms exist, bleeding, purgatives and injections constitute our safeguards against injury."

For the Southern Planter.

TOBACCO.

Messrs. Editors,—My object is to say, or rather to ask, something about tobacco. Does it not seem to you, that there can be no substitute for the tobacco crop in all that section of Virginia lying within tide water and the mountain, the ridge of lands dividing the waters running south into the James, and North Carolina?

A querist from Nottoway has asked some questions touching this subject, which I do not think have been attended to;—I should be glad to see some answers to them.

He asks, can we afford to make tobacco at five dollars? I should think not, if the system of things, which has been in operation for many years past, should be attempted to be maintained. But let reckless speculation cease, and ruinous extravagance be curtailed,—let men stop the creation of artificial wants, let not quack legislators be eternally making infractions upon the laws of nature, which must always sooner or later, be followed by the appropriate penalty—let such things be done, and, I think, we may get on pretty well with five dollars for our tobacco.

But our lands in this part of Virginia are well nigh all cleared up, and farmers are beginning to use the axe with a more cautious and sparing hand. What then is to be done? Something must be done, which has not been practised for the last twenty years, for if the sterility and poverty of our lands are suffered to go on in the same ratio for the next twenty years, there are numbers of farms, which I could name, that could not afford a livelihood to those who now inhabit them.

For tobacco, it is quite certain, we must have manured lots. How shall a farmer with ten hands so manage, as to have a lot of a hundred thousand tobacco hills in cultivation every year? or say, seventy-five thousand? I have seen no accounts of experiments made on high land, but I believe it is pretty well known that low land lots, when once made rich, may be kept so, by being sowed in oats, and cultivated in tobacco, alternately.

I have high land lots only, and am convinced I shall not be able to keep them up by any supplies of manure, which my farm-pen and stables may yield. I must try and make them help themselves. I commenced the trial in the spring of 1841, by sowing and turning in a crop of oats.

The season proved rather dry for oats, and when turned in (about the middle of July) the crop was not so heavy as I wished. To make amends for the deficiency, and to shade the ground, I sowed corn and covered it in with the oats. The corn soon came up, and grew rapidly. Just before the setting in of frosts, I turned that in also—not fully, however, for the ground was so very light from the previous fallow, and the crop so abundant, that it was impossible to hide the whole of it.

In the spring, when preparing the land for tobacco, I found that many of the stalks, which had been put well under ground, still preserved their green appearance, but were soft, and when mashed, would throw out a juice that was thick and acid. I liked such appearances very well.

But here is the 17th August, and the experiment determines nothing in its results. The tobacco was planted the 24th May, and grew off finely. The rains set in, and have kept up till now, which checked the tobacco, and caused the leaves to be narrow and small. And now it is firing rapidly.

Well, I have another lot, which I am subjecting to the same experiment. The crop of oats was very heavy. The corn sown, when they were turned in is now growing with great rapidity, and by frost, will be four to six feet high. I am hesitating about the best plan to dispose of this corn. Must I turn it in as I did last year, cut it down and let it lie and rot on the ground, or take it to the laboratory of the stable and farm-pen?

A. Z.

Amelia, 17*th August*, 1842.

For the Southern Planter.

SASSAFRAS.

Messrs. Editors,—In the number of the Planter for the present month a correspondent inquires how a certain mode, recommended as calculated to destroy the growth of sassafras bushes, must be carried into effect under certain circumstances, which he mentions. Now, although I cannot give him the exact information that he desires, yet I think that I can put him upon a plan, by the adoption of which, the evil of which he complains can be exceedingly alleviated, although not eradicated, for that I believe is next to an impossibility. It is simply this. Let him turn his horned cattle upon those parts of his fields where the sassafras is growing, in the months of August and September, and he will find that they by biting and trampling will so disable and cripple the bushes, that their growth will be retarded in a very great degree in the following spring. I think that this mode of treating them is preferable to that of keeping the sheep upon the fields for such a length of time. As to the destruction of the clover, which "An Inquirer" wishes to avoid, I think that he will find that the injury done the clover will be amply coun-

terbalanced by the benefit he will derive from the crippling of the sassafras bushes. I have been informed of another mode of preventing the encroachments of the sassafras; it however has not come under my immediate observation, and I can merely tell it to you as it was told to me; it is to permit some one or two sassafras bushes, in different parts of the fields where there seems to be a probability of being a patch of them, to assume the shape of trees, in which case they are not so apt to send forth shoots as when constantly and entirely grubbed up; for in this plant, like the fabled hydra, when one head is destroyed it is instantly replaced by two others. There is, I understand, in this county a remarkable proof of the efficacy of the mode here described of destroying the sassafras. In two adjoining fields the two opposite methods have been pursued, and in that where the bushes were allowed to become trees, there are few or no young ones to interfere with the grain crops, whilst in that where they were grubbed up, they are exceedingly numerous and troublesome.

If you think this communication likely to be beneficial, you of course are at liberty to publish it.

I am, &c. &c. X.

Hanover, July, 1842.

STONES ON CULTIVATED LAND.

It is an error to suppose (says the Boston Mer. Journal) that stones should be entirely removed from land which is under cultivation.—Those stones, which would be in the way of the scythe while mowing, of course should be removed, but all the smaller stones should remain; and if wholly or partially embedded in the soil, they preserve the moisture during a drought, and thus serve materially to increase the crop. The following article from the Gentlemen's Magazine, published in 1773, is to the point:

"It has been long known to experienced farmers, that taking away very small stones and flints is detrimental to ploughed lands in general; but more particularly so to thin light lands, and all lands of a binding nature. It was, however, never imagined that the damage could be so great, as it is now found to be, since unusual quantities of flints and other stones have been repeatedly gathered for the use of turnpike roads. In the parish of Stevenage, in Hertfordshire, there is a field known by the name of Chalkdell-field, containing about two hundred acres; the land in this field was formerly equal, if not superior, to most lands in that county; but lying convenient for the surveyors of the roads, they have picked it so often, and stripped it of the flint and small stones to such a degree, that it is now inferior to lands that were formerly reckoned not much above half its value, acre for acre. Nor is it Chalkdell-field alone that has materially suffered in that county by the above mentioned practice; several thousand acres bordering on the turnpike roads from Wellwyn to Baldoch have been so much impoverished, that the loss to the inheritance forever must be computed at a great many thousand pounds. What puts it beyond a doubt that the prodigious impoverishment of the land is owing to no other cause but picking and carrying away the stones, is, that those lands have generally been most impoverished which have been most often picked; nay, I know a field, part of which was picked, and the other part ploughed up before they had time to pick it, where the part that was picked lost seven or eight parts in ten of two succeeding crops; and though the whole field was manured and managed in all respects alike, yet the improvement was visible where the stones had been picked off, and extended not an inch farther; an incontestible proof of the benefit of the stones."

For the Southern Planter.

BRIERS.

Messrs. Editors,—In looking over your August number I find a request from Mr. William Massie for information as to the best mode of getting rid of briers. I presume he alludes to those briers which run upon the ground, commonly known by the name of dewberry. The blackberry brier grows up with a perpendicular stem, and is easily eradicated; but the brier in question, is surprisingly difficult to remove.—This arises from the depth of its roots and their various branches, which run and spread over the land at the distance of six or eight feet, and from the multiplicity of joints in those spreading branches, which put out roots and enter the earth, and ultimately, if undisturbed, form a complete mat over the ground. Some of my fields were formerly much infested with this pest, which has been happily nearly removed. The best mode to get rid of them that I have discovered, is to have them cut up (or at least the tops cut off below the surface) several days before ploughing for corn or other grain, and suffer them to wilt or dry before following with the plough; else every branch will produce a new growth from each joint, thereby increasing the crop of briers, probably, tenfold: especially after the spring ploughing for corn, when the earth is cool and moist, will the branches multiply. If the land is planted in corn, in the month of June, just before harvest, turn in all hands with grubbing hoes, and take up by the roots, the remaining briers, which may have escaped the implements of cultivation, and then again in the month of August, use the same process.

Uprooting on the wane of the moon in August, the Dutch say will prove most destructive.

Remember to cut them up several days before ploughing, so that the tops are lifeless before being turned in. The strict observance of this process will effectually eradicate this great annoyance of the farmer.

S. Davis.

Brucetown, Frederick, Va.

GRANARY.

On a late visit to a branch of the Cooper family, New Jersey, I observed that the granary, or place for stowing away grain of different descriptions, was fitted up with bins in the shape of very large and strong iron-bound casks of the usual shape; and in these the wheat, &c. was preserved for any period, no matter how long, without fear of weevil, grain-worm, or any other species of vermin, or damp and mouldiness; the grain being introduced by means of a funnel through the bung-hole, which, when the cask is full, is very carefully closed and made air-tight; the casks also being kept in repair and perfectly air-tight, the hoops being driven occasionally to cause them to become so. Now by this very simple arrangement, the whole crop of grain on a farm may be preserved for years, as perfectly free from dampness or disease of any kind, as though it had been kiln-dried; the convenience of stowage being as great as in open bins; the casks standing on low tressels or sleepers, admitting a bushel measure under, they can be rolled on to the bung; or the grain might be drawn off by a large tap made for the purpose.

And this mode of packing would be efficient in the preservation of many other articles, which, if too bulky for admission through the bung-hole, could be performed by removing one of the heads and replacing it when the cask was full, seeing that the hoops were driven so as to insure perfect closeness. Thus might fruit-trees, flowers, and fruit itself, be preserved during long voyages, and we could be supplied with the choicest specimens of either, from the most distant parts of the globe.—*Farmers' Cabinet.*

SICK HEADACHE.

Two teaspoonfuls of finely powdered charcoal, drank in a half tumbler of water, will in less than fifteen minutes give relief to the sick headache, when caused as in most cases it is, by superabundance of acid on the stomach.

For the Southern Planter.

HARVEST DRINK.

Messrs. Editors,—In former times, my husband (John Dumpling) and all our neighbors, used to think there was no getting through harvest without drinking whiskey. Three black bottles a day, he and his hands used to drink; four or five cutters there were, and as many tyers. They drank an amazing quantity of water, too: it kept a stout lad of fifteen, constantly agoing, with a pail on his head. 'Twas the *water* that always hurt them, when they *were* hurt. They would often have a cramp in the stomach, and drop down in the hot sun, as if dead, after drinking so much: and then, the whiskey always recovered them. The whiskey never made them fall: no, no, it gave them new strength and briskness. To be sure, other bad accidents did sometimes happen. Cradles and blades got broken. Ugly cut the mowers would give, in pushing to take the row from one another. Quarrels arose of evenings; and now and then, the folks fitt. A mighty heap of wheat was left uncut, or lying helter-skelter about the field. And when harvest was over, the cradlers were so broken down, that it was almost a week before they could well do any other work.

The change now is a wonder to every body. For three years, John's hands or himself have had no whiskey, at any kind of work. Well, you would laugh to see how different harvest is, from what it used to be. The folks don't drink a fourth part of the water: a small one of the drap-shot gang brings a plenty for them, besides shocking after two good tyers. No bad accidents seem to happen. Nobody has cramp in the stomach, or falls down with the heat, as if dead. No broken cradles, or blades—no ugly cuts—no quarrels, or fights. Then, after harvest, the people are all as fresh, and ready for other work, as if they had only been planting peas, or pulling fodder. And the wheat is so much closer cut, and cleaner got up, that my old man says the crop turns him out a'most a fourth more than it used to. Capting Jones and Major Crane, and at least a dozen besides in our neighborhood, all do like John, and say the same. The Capting and he said the other day, that two hundred farmers in Albemarle went through last harvest without any intoxicating drink. What they gave their hands was buttermilk, or molasses and water with a touch of vinegar, or plain water.

A happy change it is, Messrs. Editor, for me. I am a happy wife now. John never comes home from court cross and staggering. He does not go security for any body unless it is perfectly safe; never games, or fights, or falls off of his horse. The children run to meet him, not at all afraid. And I have not dreamt that I was sleeping with a whiskey barrel these two years. We are all cleverly dressed; the windows are glazed, the door hung on good hinges; the fences and farm all in neat order; very, very different from old times. And the little Dumplings! It would do your heart good now to see

them. For rosy cheeks and healthy, full shaped limbs, they are a match for any body's children.

I do wish, gentlemen, you would tell all the farmers and planters who read your paper, that the main point in farming is to take the pledge, like my husband and neighbors. At least, any person would say so, judging by the alteration in their houses and lands, and wives and children, since they took the pledge.

Your friend,

DOROTHY DUMPLING.

P. S.—John says, that he, Capting J. and five or six others at meeting t'other day, under the big oak before sermon, all agreed that their negroes don't now drink half so much whiskey of their own getting, as they used to—don't go the groceries a fourth as often, and don't do a tenth of the stealing. For (says the Capting) nine-tenths of negro roguery is for the sake of whiskey. By not having it at any of their work, they have lost the relish for it. D. D.

Albemarle County.

GALVANIC PLANT PROTECTOR.

The above is a very ingenious and philosophical apparatus for the protection of plants from insects. We imagine, however, that it is likely to prove more interesting in description, than useful or economical in practice.

"*Editors of the Cultivator*,—The London Mechanic's Magazine contains an ingenious application of galvanism, for the purpose of preventing the attacks of molluscæ on dahlias, and other delicate plants. I send you the above drawing of it, in hopes that it may prove useful to that portion of your readers who are florists, and that some similar arrangement may be devised for preventing the ascent of worms and insects on our fruit trees. The original inventor of this apparatus has tested its utility during twelve months, and not a plant thus protected was injured; while those which were unprotected, suffered severely. The Protector is a conical ring of zinc, four inches deep, adjusted to the interior of the flower pot, the top end of which, *a*, *b*, is flanged off about half an inch, and cut into vandyked points; immediately under the flange, and on the outside of the ring of zinc, a ring of copper, E, F, is neatly fitted.

"In order to use the Protector, press the inferior edge of the zinc ring, *c*, *d*, into the earth, until the inferior edge of the copper ring, *x*, *y*, is

about one and a half inches above the surface of the soil. The molluscæ may crawl up the zink with impunity; but on coming in contact with the copper, they receive a shock which causes them to fall back to the ground. If the larger of this tribe attempt to stretch across and above the copper belt, avoiding contact, they would be incapable of holding by the points. The Protector acts in wet or dry weather, and is always in action. There is nothing said in the memoir, respecting the influence of the instrument on the growth of the plants under its protection, but my impression is that the constant electric action must stimulate the growth of the plant, and increase the size and beauty of its flowers.

N. N. D."

RAISING CHICKENS.

It has been remarked that a hen with one chicken will scratch as many hours in a day as a hen with a dozen. If you would raise a large brood let three hens have their eggs to sit on, all commencing at one time. After hatching, put *one* of the hens in a coop in the garden, and in the evening take all the chickens from the other two and put them under the first. She will take charge of all, and leave the other hens at liberty to lay more eggs.

TO PREVENT THE ROTTING OF POSTS IN THE GROUND.

Place ashes or lime on the surface of the earth around the posts. This will render them twice as durable, and will prove a great saving where the fence is costly. Lime mortar has been recommended to encase all that part of the post which is under the surface; but this is not necessary, since the *bottom* of the post will often last as long as the top.

GERMINATING SEEDS UNDER COLORED GLASS.

The following remarks by Mr. Hunt, the Secretary of the Royal Polytechnic Society, in England, relate to a most curious discovery—and one which may prove very useful to the cultivators of rare exotics. We hope some of our readers will be stimulated to repeat the experiments, and to send us the results.

"It is scarcely necessary to explain that every beam of light proceeding from its solar source, is a bundle of different colored rays, to the absorption or reflection of which we owe all that infinite diversity of color which is one of the greatest charms of creation. These rays have been long known to possess different functions.

"The light which permeates colored glass, partakes to some considerable extent of the character of the ray which corresponds with the glass in color; thus blue glass admits the blue or *chemical* rays, to the exclusion, or nearly so, of all the others; yellow glass admits only the permeation of the *luminous* rays; while red glass cuts off all but the heating rays, which pass it freely. This affords us a very easy method of growing plants under the influence of any particular light which may be desired.

"The fact to which I would particularly call attention is, that *the yellow and red rays are destructive to germination*, whereas *under the influence of violet, indigo, or blue light, the process is quickened in a most extraordinary manner.*

"The plants will grow most luxuriantly beneath glass of a blue character; but beneath the yellow and red glasses the natural process is entirely checked. Indeed, it will be found that at any period during the early life of a plant, its growth may be checked by exposing it to the action of red or yellow light.

"It is with much satisfaction that I find the results to which I have arrived, corroborated by Dr. F. R. Horner, of Hull."

Blue glass for hot-beds could be very conveniently employed.—*New Genesee Farmer.*

VELVET CARPET.

Most people have seen a beautiful article of paper hangings, usually termed "velvet paper," the figures on which resemble fine cassimere of brilliant colors. The velvet carpet is made on a similar principle. The base is of cheap and strong cotton sheeting. The figures are formed of old woollen cloths of various colors ground up fine, and secured to the base by a strong copal cement. The rich and elegant figures are rapidly formed by a peculiar process and operation of machinery. This carpet is calculated to be very durable, and will come into market cheaper than any other kind, for handsome floors.

American Mechanic.

SURPRISING PROPERTY OF OIL.

The action of oil, in stopping the violent ebullition of various substances, is truly surprising. It is well known, that if a mixture of sugar and honey, or the like, be boiling upon a fire, and boiling over the vessel, the pouring in of a little oil, makes it immediately subside. In many cases, the marking of a circle round the inside of a vessel, in which liquor of this kind is to be boiled, with a piece of hard soap, will, like a magic ring, confine the ebullition to that height, and not suffer it to stir any further.

This is wholly owing to the oil, or fat, contained in the soap; but there is, besides these, another very important use of oil, on a like occasion, which is, the pouring of a little of it on any metalic solution while making. This re-

strains the ascent of the noxious vapors, preserves the operator from danger, and at the same time, by keeping down the evaporating matter, gives redoubled strength to the menstruum.—Pliny has mentioned an extraordinary effect of oil, in stilling the surface of water, when it is agitated with waves, and the use made of it by the divers, for this purpose.

HOW TO COOK CUCUMBERS.

We have seen a recipe to cook cucumbers, somewhat after this fashion:

Take the cucumbers and after cutting off the rind, cut them into slices, then cut up a few onions with them, pepper and salt them to your liking, and add vinegar to them—and then,—open your window and throw them away.

This is the usual way of preparing them for the table, and doubtless, the recipe is so worded as to impress the idea of their *unhealthiness*, and we must confess, that we are among those who have so esteemed them. But if *cooked* as below stated, we conceive them not only to be wholesome, but among the most palatable vegetable dishes with which the table can be garnished. Our method is this:

Pare off the rind, then cut the cucumber into slices *lengthwise*, dust either side of those slices with corn meal or wheat flour, pepper and salt them to please your taste; this done, fry them brown, and you will have one of the most delicious dishes that you can imagine, combining in their flavor those of the oyster plant and egg plant. Of their healthfulness, thus cooked, there can be no question, and of their palatableness, it is only necessary that you *try them*, to say with us that they are exquisite.—*Am. Farmer.*

HOGS.

The following article, from Bell's Life in London, pointing out as it does a new use for that valuable, and now fashionable, animal, the hog, may furnish a valuable hint to the breeders of the different varieties, whereby their manifold qualities may be much enhanced; and the stock, that next arrive at a thousand weight on a gallon of corn, may, possibly, excel their competitors in the more sportsmanlike quality of *pointing*.

"A Pointer Sow.—A correspondent, under the signature of 'Norwich,' asks in your paper of the 6th instant—'Was there ever a sow in this country that would find and point at game, and was shot to as a regular pointer?' Allow me to state that there is a notice of one having been taught to perform the service of a pointer, and find game. A gamekeeper of Sir Henry Mildmay broke a black sow to find game, back, and stand to her point nearly as steadily as a well-bred dog. The sow was a thin, long-legged animal of the New Forest breed. When young, it manifested a great partiality for some pointer puppies, and it occurred to the gamekeeper that as he had often succeeded with obstinate dogs, he might attempt to break a pig. He enticed her to follow him by bits of barley-meal pudding, which he carried in one of his pockets, while the other was filled with stones, which he threw at his pupil when she misbehaved, as she would not allow herself to be caught and corrected like a dog. Under this system she proved tolerably tractable. When she came on the cold scent of game she slackened her trot, and gradually dropped her ears and tail till she was certain, and then fell down on her knees. As soon as the game rose she returned, grunting for her reward of pudding. When the gamekeeper died, his widow sent the pig to Sir H. Mildmay, who kept it for three years, and often amused his friends by hiding a fowl among the fern in some part of the park, and bringing out the pig, which never failed to point at it in the manner described. Some time after, a great number of lambs were lost, nearly as soon as they were dropped, and a person being sent to watch the flock, detected the sow in the act of devouring a lamb. This carnivorous propensity was ascribed to her having been accustomed to feed with the dogs on flesh; but it obliterated the memory of her singular sagacity, and she was killed for the benefit of the widow of the gamekeeper who trained her.

GRAFTING A WHOLE TREE.

A neighbor of Van Mons, the celebrated Belgium horticulturist, having a good apple tree of some ten feet in height which he was obliged to cut down, Van Mons determined to make an effort to preserve it entire, by grafting it on one of his own, but of inferior fruit. A tree of the same size was selected, which was cut square off a little distance above the ground, the surface of both made smooth, and the graft or rather tree placed in its new position by the operation of pin grafting. Grafting clay was placed around the junction, earth heaped over the spot, and the tree strongly secured by stakes. A union between the parts was soon effected, and the second year the tree fruited as well as formerly.

TO CURE SHEEP-SKINS WITH THE WOOL ON.

Take a spoonful of alum and two of saltpetre; pulverise and mix well together, then sprinkle the powder on the flesh side of the skin, and lay the two flesh sides together—leaving the wool outside. Then fold up the whole skin as tight as you can and hang in a dry place: in

two or three days as soon as dry take down, and scrape with a blunt knife till clean and supple. This completes the process, and makes you a most excellent saddle cover. If when you kill your mutton you treat the skins in this way, you can get more for them from the saddlers than you can for the wool and skin separately disposed of otherwise.

N. B.—Other skins which you desire to cure with the fur or hair on may be treated in the same way.—*S. W. Farmer.*

APPLES FOR STOCK.

Under this head, a "Practical Farmer," in the Boston Cultivator, says—"Last year I butchered a hog sixteen months old which weighed 500 lbs. *For some weeks before bringing him to the tub, he ate nothing but boiled apples.*" Corn meal cooked was offered him, but refused; the pork was of the best quality, and though the moon was not consulted in killing him, the

"Meat ne'er shrunk a bit i' the pot."

MISCELLANY.

At the earnest request of some of our most valued subscribers we have determined whenever we can do so conveniently to renew our head of Miscellany, which we have for some time permitted to be crowded out by the press of Agricultural matter.

PASSION.

Horace Walpole tells the following story of a passionate man:

"Gen. Sutton, brother of Sir Robert Sutton, was very passionate: Sir Robert Walpole the reverse. Sutton being one day with Sir Robert, while his valet de chambre was shaving him, Sir Robert said, 'John, you cut me'—and then went on with the conversation. Presently, he said again, 'John, you cut me'—and a third time—when Sutton, starting up in a rage, and doubling his fist at the servant, swore a great oath, and said, 'If Sir Robert can bear it, I cannot, and if you cut him again I'll knock you down.'"

CROWDING THE PROFESSIONS.

One of the ablest periodical writers of Great Britain, speaking of the ambition in that country of adopting professional life of all kinds, and of the rush, if we may so call it, into the professions of "law, physic and divinity," thus points the mind's eye to the general consequences, or some of them:

"But thousands have died of broken hearts in these pursuits, thousands who would have been happy behind the plough or opulent behind the counter; thousands in the desperate struggle of thankless professions look upon the simplicity of a life of manual labor with perpetual envy; and thousands, by a worse fate still, are driven to necessities which degrade the principles of honor within them, accustom them to humiliating modes of obtaining subsistence, and make up, by administering to the vices of society, the livelihood which was refused to their legitimate exertions."

STAYS.

Lady Mary Wortley Montague says: "One of the highest entertainments in Turkey is having you to their baths. When I was introduced to one, the lady of the house came to undress me—another high compliment to pay to strangers. After she had slipped off my gown, and saw my stays, she was much struck at the sight of them, and cried out to the ladies in the bath, 'come hither, and see how cruelly the poor English ladies are used by their husbands; you need not boast, indeed, of the superior liberties allowed you, when they lock you up thus in a box.'"

FIGHTING ON ONE'S OWN HOOK.

At the battle of Yorktown, whilst the aids of the American Chief were issuing his orders along the line, a man was discovered a short distance from it, who presented rather a grotesque appearance, being dressed in the coarse common cloth worn at the time by the lower orders in the back country, with an otter cap, the shape of which very much resembled the steeple of a meeting house, and a broad leather apron. His equipment consisted of a small woodchuck's skin, sewed together in the form of a bag, and partly filled with buck-shot, an ox-horn filled with powder, and an old rusty gun; which measured about seven feet eight inches from the muzzle to the end of the breech, and which had probably lain in the smoke ever since the landing of the pilgrims. One of the aids passing him in the course of his rounds, inquired of him to what regiment he belonged. "I belong to no regiment," said the fellow; after he had fired his "long carbine." A few moments after, the officer rode by again; but seeing the fellow very busy, and sweating with exertion, he once more inquired to what regiment he belonged. "To no regiment," was the answer, the speaker at the same time levelling his piece at a "red coat," who was preparing to fire, but who dropped dead before he had half raised his gun. "To what company do you belong?" "To no company!" "To what battalion do you belong?" "To no battalion!" "Then where the devil do you belong, or who are you fight-

ing for?" "Dang ye," said the fellow, "I don't belong any where, I'm fighting on my own hook!"

MARRYING YOUTH AND AGE.

Gumilla relates in the History of the River Oronoco, that there is a nation which marries old men to girls, and old women to youths, that age may correct the petulance of youth. For, they say, that to join young persons equal in youth and imprudence in wedlock together, is to join one fool with another. The marriage of young men with old women is, however, only a kind of apprenticeship, for after they have served for some months, they are permitted to marry women of their own age.

IT NEEDS GENIUS TO DISCOVER GENIUS.

Strange as it may seem, Robinson Crusoe was hawked about through the trade, as a work of neither mark nor likelihood, and at last accepted as a proof of especial condescension, by an obscure retail bookseller. It is singular, but not less true—and we leave our readers to draw their own inference from the fact—that almost every book of any pretensions to originality, has been similarly neglected. Paradise Lost with difficulty found a publisher; while the whole trade vied with each other in their eagerness to procure the works of such dull mechanical writers as Blackmore and Glover. Gulliver's Travels lay ten years in manuscript for want of due encouragement from the booksellers; and in our time, and in a higher branch of literature, the Miseries of Human Life, and the still more ingenious Rejected Addresses, were refused by the trade with indifference, if not contempt. To crown the list of works thus misunderstood, Sir Walter Scott has left it on record, that Waverly was actually declined three several times by the acutest publisher of his day; and at last ushered into the world, after it had lain twelve years unnoticed in its author's desk, with doubt, hesitation and indifference.—*Credite Posteri.*

WHY WOMAN WAS TAKEN FROM THE RIBS.

Mathew Henry says: "Woman was made of a rib out of the side of Adam; not made out of his head, to top him—not out of his feet, to be trampled upon by him—but out of his side, to be equal with him; under his arm, to be protected; and near to his heart, to be beloved."

WALTER SCOTT'S ADVICE TO HIS SON CHARLES.

"I cannot too strongly impress upon your mind, that labor is the condition which God has imposed on us in every station in life. There is nothing worth having that can be had without it, from the bread which the peasant wins with the sweat of his brow, to the sports by which the rich man must get rid of his ennui. The only difference betwixt them is, that the poor man labors to get a dinner to his appetite, the rich man to get an appetite to his dinner. As for knowledge, it can no more be planted in the human mind, without labor, than a field of wheat can be produced without the previous use of the plough. There is, indeed, this difference, that chance or circumstances may so cause it, that another shall reap what the farmer sows; but no man can be deprived, whether by accident or misfortune, of the fruits of his own studies; and the liberal and extended acquisitions of knowledge which he makes are all for his own use. Labor, my dear boy, therefore, and improve the time. In youth our steps are light, and our minds are ductile, and knowledge is easily laid up. But, if we neglect our spring, our summers will be useless and contemptible, our harvest will be chaff, and the winter of old age unrespected and desolate."

Again: "Read, my dear Charles, read, and read that which is useful. Man differs from birds and beasts, only because he has the means of availing himself of the knowledge acquired by his predecessors. The swallow builds the same nest which its father and mother built, and the sparrow does not improve by the experience of its parents. The son of the learned pig, if it had one, would be a mere brute, only fit to make bacon of. It is not so with the human race.—Our ancestors lodged in caves and wigwams, where we construct palaces for the rich and comfortable dwellings for the poor; and why is this, but because our eye is enabled to look upon the past, to improve upon our ancestors' improvements, and to avoid their errors? This can only be done by studying history, and comparing it with passing events."

JOHN RANDOLPH OF ROANOKE.

A member of Congress made a three days' speech. In the course of it, discovering symptoms of impatience in the House, he remarked that "he spoke not for that House nor for that generation—he spoke for posterity." Mr. Randolph interposed, "you will speak *to* them, sir, if you speak much longer."

WOMEN.

Francis I. of France, was the first monarch who introduced ladies at his court. He said, in a style of true gallantry, that a drawing-room without ladies was like the year without the spring; or rather like the spring without flowers. At no time of life should a man give up the

thought of enjoying the society of women. "In youth," says Lord Bacon, "women are our mistresses, at a riper age our companions, in old age our nurses, and in all ages our friends."

Fontenelle being one day asked by a lord in waiting, at Versailles, what difference there was between a clock and a woman, instantly replied, "A clock serves to point out the hours, and a woman to make us forget them."

MUNCHAUSEN.

Many doubts have been expressed whether such a person ever existed: the following brief sketch, by Mr. Lieber, a learned German, sets the matter at rest; Jerome Charles Frederic Von Munchausen, the original of the well known narrator of wonders, was a German officer who served several campaigns against the Turks, in the Russian service. He was a passionate lover of horses and hounds; of which, and of his adventures among the Turks, he told the most extravagant stories; and his fancy, finally, so completely got the better of his memory, that he really believed his most improbable and impossible fictions, and was very much offended if any doubt was expressed on the subject. In relating these monstrous lies, his eyes would shine and stare out of his head, his face became flushed, the sweat rolled down from his forehead, and he used the most violent gestures, as if he were really cutting off the heads of the Turks, or fighting the bears and wolves that figure in his stories. Having become acquainted with the poet Burger, at Pyrmont, and being pleased with his society, Munchausen used to relate those waking dreams to him; and the poet afterwards published them, with his own improvements, under the title of Wunderbare Abenthener und Reisen des Herrn Von Munchausen, translated from the English, 1787. A part of them had already appeared in the third volume of the Deliciæ Academicæ under the title of *Mendacio ridicula*. The wit and humor of the work gave it great success, and it was translated into several foreign languages. When it appeared in England, the British reviewers labored hard to show that it was a satire upon the ministry. Munchausen was very angry with the liberty thus taken with his name, and Burger became involved in some difficulties in consequence.

OBTAINING AN INTRODUCTION.

A poor young fellow in France, who was destitute of employment, fixed his eye on a small office, the salary of which was far from being considerable. It was in the patronage of a nobleman, to whom the candidate had not access, but he was acquainted with M. de Ville, who pretended to have some influence with the nobleman, to whom he promised to introduce him. This he neglected to do so long, that the purse and patience of the candidate were exhausted. In this dilemma, he resolved to do that for himself, which he despaired of from the friendship of his acquaintance. Seeing the duke one day on the mall, he suddenly stepped behind him, and tapping him familiarly on the shoulder, exclaimed, "Ah! how do you do, my old friend?" The duke turned round with astonishment, when the ingenious intruder assuming all the marks of embarrassment and confusion in his countenance, begged pardon for his mistake. "I took you, sir," said he, "for M. de Ville, whom I have been looking for all over the mall, as he is this day positively to introduce me to his highness the duke, a favor I have been expecting every day for nearly a month." The nobleman smiled at the seeming singularity of the adventure, and replied, "Pray, what may be your business with his highness? I think I possess some influence." The candidate then explained his views, and his wishes, producing testimonials of his character and abilities. Great men are generally fond of such adventures, and this one ended to the satisfaction of both parties; the young man obtained the situation, and proved himself worthy of it.

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THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.* | Tillage and Pasturage are the two breasts of the State.—*Sully.*

C. T. BOTTS & L. M. BURFOOT, Editors.

VOL. II. RICHMOND, NOVEMBER, 1842. No. 11.

For the Southern Planter.

RUST.

Big Lick, Roanoke, Oct. 11, 1842.

Messrs. Editors,—An absence of several weeks from home has prevented my attending earlier to the very sensible and judicious suggestions of the American Farmer on the subject of Rust in Wheat by way of comment on my essay which was published in your July number.—The Editor, after some complimentary remarks upon the style of my piece, (for which I tender him my respectful acknowledgments) and an expression of concurrence in my views of the origin and nature of rust, dissents from the inference I have drawn, that "it is an evil without remedy—dependant upon the seasons, and of course beyond human control." This quotation, which is expressed rather too unqualifiedly, even in its connexion with what is explanatory, when separated from its context and presented in the isolated form in which it appears in the Editor's comment, would justify the inference that I have no faith in the preventives suggested by him. Such, however, is not the fact. To be consistent with my own views I should have said whatever skill the farmer may exert in guarding against rust he would not be able to avert it always. That, resulting, as the disease does, from an excessive flow of sap, induced most generally by a succession of sun and showers, (hot, muggy weather, as they call it in England,) at at the particular period when the stalk has attained its growth and seed are about being formed, a concurrence of *natural* causes favorable to the disease would produce it in spite of all human precaution. I never doubted that sowing early, so as to bring the crop in before the hot, showery weather, which we usually have about the last of June or first of July, would increase the chances of escaping rust; nor did I ever doubt that the use of clover fallow and such like slow and bland manures, would make our crops much less liable to this evil than if we were to stimulate them with the coarse, gross and active manures of the farm-yard; nor can there be any question that wheat grown upon the southern and south-eastern exposures of rolling and elevated land, is much less liable to the disease than that which is grown in valleys or on bottoms. These are the views which I have always entertained of this disease; and, if there is any thing in my essay of last July which induces a different impression, it must have resulted from the haste and carelessness of the composition. As it is agreeable to receive the suggestions and compare opinions with one whose views are marked with so much good sense, and whose deportment is so courteous as that of the Editor whose remarks I am canvassing, I will occupy your pages on this subject a little longer.

I would say then to the Editor of the American Farmer that, whilst the means suggested by him for averting the disease would unquestionably diminish its frequency, yet I cannot think they could be relied upon as a complete and absolute preventive. Independent of the reasoning which I have heretofore employed, and which it is not my purpose to repeat; all the facts of the past season are in the teeth of such an opinion. In the counties of Roanoke, Botetourt and Montgomery, the late season being peculiarly favorable to rust, it fell alike upon rank and light wheat,—upon that sown on clover leys, as well as that on corn lands,—upon that sown early and upon that sown late. Whilst, in some cases, circumstances modified the degree of injury, none entirely escaped the blight. The very means suggested by the Editor were pursued in numerous instances, and whilst, in ordinary seasons I have no doubt they would have proved an efficient corrective—they were certainly of little avail the present year. In addition to the employment of the precautionary means alluded to, and in the value of which I heartily concur with the Editor, he suggests the sowing of plaster on the clover before ploughing it down as an auxiliary agent in preventing the too rapid decay of vegetable matter. This is the only idea in his commentary from which I am inclined to dissent and I express this dissent with all the deference which becomes one who has so indifferent a knowledge of organic chemistry as myself.

Our experience is that plaster gives succulence, luxuriance and rapidity of growth to all plants upon which it is sown, and, if we are not mistaken, the idea of the American Farmer must be erroneous, as the the growth of the crop would be stimulated and the danger of rust consequently enhanced instead of diminished by the application of plaster. With these views I have thought that this mineral could not be safely

applied to our rich clover-leys, but might perhaps be profitably applied as a November dressing to our corn-land wheat. I so told a member of our Agricultural Board, one of our most prudent and intelligent farmers, on yesterday—who strengthened my opinion by informing me that he intended to plaster his corn land, but was afraid to use it on the clover ley. It is possible, as I have heard maintained by judicious farmers, that plaster may hasten the maturation of the crop, and thus contribute to its protection from rust; of this, however, I have no certain knowledge, nor do I think the experiments in this quarter have been at all satisfactory. I feel inclined to the opinion that the best mode of diminishing the frequent recurrence of this most disastrous malady is tolerably early sowing on clover-leys, as suggested by the Editor of the American Farmer. Rich and active manures in which decomposition is rapid, must greatly augment the chances of rust. In proof of which single stalks or bunches of wheat growing about manure heaps are invariably covered with rust, whatever may be the season. As heat and moisture are the great agents of decomposition, and rapid decomposition, by its affording an excess of nutriment, the source of this disease, it follows as a corollary that valleys and bottoms which retain moisture should be thoroughly drained by ditches and high beds, or they cannot be relied upon for a crop of wheat. Equally clear is the deduction in favor of deep ploughing, which will create a deep soil, through which the rains may drain off readily to the subsoil, where the straggling fibres can imbibe a sufficiency of moisture for healthy growth, without having the delicate vessels of the plant too much distended and their functions disordered by an excess.

I hope these few hasty and desultory observations will be the means of drawing out the Editor of the American Farmer more fully, as the subject is now exciting more interest than any other in agriculture, and we are opposed in our theory by a great many able and intelligent men, who incline to the opinion that rust proceeds from a sort of parasitic fungus which attaches itself to the grain.

Yours, respectfully,

W. M. Peyton.

P. S.—Since writing the above, I have been informed by a highly intelligent and respectable farmer that plaster had been applied to a considerable extent upon the last wheat crop in the county of Bedford. The plaster, generally, was sown in the fall, and in every instance, the wheat was destroyed by rust; wherever opportunities of comparison were afforded, the result proved, that the wheat to which the plaster had been applied was much more injured by the rust than that where it had been omitted.

W. M. P.

AGRICULTURAL MEETING IN KING WILLIAM.

By request, we insert the following notice of an Agricultural Fair to be held in King William. We shall be much obliged to gentlemen, who will furnish us with reports of any thing of interest that may transpire at our various exhibitions this fall:

The King William Agricultural Society will hold their fall meeting at Mulberry Hill Tavern (Capt. Prince's) on the 18th of November.

Premiums will be awarded by the Committees for the best conducted experiments on agricultural subjects, and for the following:

1. For the best acre of corn,	$5 00
2. For the best acre of wheat,	5 00
3. For the best half acre of ruta baga,	3 00
4. For the best quarter acre of sugar beets,	3 00
5. For the best quarter acre of sweet potatoes,	3 00
6. For the best quarter acre of Irish potatoes,	2 00
7. For the best bull calf one year old,	3 00
8. For the best bull,	5 00
9. For the best milch cow,	3 00
10. For the best colt under three years,	3 00
11. For the best boar,	3 00
12. For the best sow,	3 00
13. For the best buck,	3 00
14. For the best ewe,	3 00
15. For the specimen of best butter, 5 lbs.	2 50
16. For best domestic carpet, (20 yards,)	5 00
17. For the best domestic counterpane,	2 00
18. For the best domestic rug,	3 00
19. For the best suit of domestic cloth,	2 00

W. Gwathmey, *Secretary*

We eschew all quackery, and feel no disposition to encourage the spirit, which gives circulation to the thousand nostrums of the day, emanating from sources as mercenary as they are ignorant; but we are always glad to publish a simple and *harmless* remedy for a common disease, especially when vouched for by a respectable name—we therefore insert the following:

For the Southern Planter.

A REMEDY FOR THE PILES.

Take the leaves of the Jamestown weed, bruise and moisten them; apply them to the part diseased three or four times a day and they will soon afford relief.

If, gentlemen, you will publish the above, I will vouch for its being the best remedy I have ever known. If the leaves are moistened with tobacco juice, so much the better. The appli-

cation is equally effectual when made to the shoulder or back of a horse that has been galled.

Yours, respectfully,

FRANCIS BLUNT.

White Plains, Hanover.

FLY-PROOF WHEAT.

The following is an extract from a letter not intended for publication, but as a great contrariety of opinion exists upon the subject of which it treats, and as we are desirous of placing before our readers both sides of every question, we have taken the liberty of publishing it, knowing, as we do, the author to be perfectly responsible for his statements. This wheat, under the name of "Mediterranean," is obtaining great favor in Pennsylvania.

* * * * "Will you allow me to advise you to be cautious in reference to the Delaware, Fly-Proof, or German wheat, by all of which names it is known. This wheat has been cultivated in this section of country for several years, and I think I err not when I say, that its value is only found in its fly-proof quality.

"It is a coarse, dark wheat, much like rye, and yielding such indifferent flour, that some of the merchants in Fredericksburg assert they will buy no more of it. The grain never looks plump though it weighs well. It has turned out miserably this year, so much so, that many of my agricultural friends, who intended before threshing it out to sow large crops of it, will seed very little, and some of them none at all.

"My object is to caution you against the wheat, because I observe you intend getting some of it for sale. I think no one will keep it more than two years."

For the Southern Planter.

Roseland, Mecklenburg, Oct. 20, 1842.

Messrs. Editors,—A number of gentlemen in the vicinity of Boydton, feeling deeply the consequences of neglect and apathy on the subject of agriculture in this county, have been forcibly struck with a notice, given in the July number of your very useful and interesting periodical, of a club formed in the county of Albemarle, called the Hole and Corner Club, No. 1, of that county, the objects of which association are to promote the interests and hasten the improvements in agriculture. Shortly after its publication, twelve gentlemen, in this neighborhood, by appointment, held a meeting to form a similar club, at which meeting, three of their number were appointed a committee to draft a constitution to regulate the action and proceedings of their Society. On due deliberation, that committee reported as follows:—That as our Association owed its origin to a notice of the Hole and Corner Club, No. 1, of Albemarle, and that as the regulations of that Club in all respects admirably suited our interests and views, that we adopt as our own, their entire regulations, with a few unimportant alterations suited to our particular situation. On the presentation of that report it was unanimously adopted by the meeting.

We style our Association the Mecklenburg Hole and Corner Club, No. 1. We have organized our Society in accordance with our Constitution by the appointment of all the necessary officers, and held five regular meetings, and at each examined minutely into the condition and operations of the farms on which we have held our meetings; and after having partaken of a social dinner, we have freely interchanged opinions and views on subjects connected with the great interests of agriculture:

We mutually agree that we *already* feel the wholesome effects of our Association; it has called forth the old Virginia sociability and hospitality, has excited our energies and produced a spirit of inquiry and exertion, which must undoubtedly (by our combined efforts) eventuate in the improvement of our social habits, and the condition of our farms.

We take this occasion, through your paper, to suggest to our brother farmers the propriety of forming similar clubs in other parts of our county and agree to hold with them a joint meeting annually in some central point to concentrate our exertions in promoting the long neglected interests of agriculture.

TINGNAL JONES, *Cor. Secretary.*

It was with great pleasure we received the above; this is exactly the sort of spirit we desire to see pervade every neighborhood in Virginia. We have before expressed the opinion, in which we are confirmed by daily observation, that, of all the different kinds of agricultural associations, this HOLE AND CORNER system is the one best calculated to effect the end in view. Come, gentlemen, let us have a club in every *hole* and *corner* in Virginia. This neighborhood association, this free and easy interchange of opinion, this frequent comparison of crops, is the very thing to elicit information, to encourage a proper spirit of emulation, and to convert the labor and drudgery of good farming into recreation and pleasure. Not the least advantage too that this system affords, is, as our correspondent suggests, its tendency to cherish that good old spirit of Virginia sociability which, although, thank God, it has not degenerated so much as

our corn fields, is fully as worthy of support and encouragement.

The idea of a grand annual meeting and general festival, we think, a very happy one. Come, let us organize, and all meet next summer at Charlottesville. What say ye?

For the Southern Planter.

DISTEMPER AND SCRATCHES IN DOGS, AND GRUBS IN HORSES.

Messrs. Editors,—The dog distemper, which yearly destroys so many useful and affectionate creatures, may be readily cured by the following simple method: Heat a pointed iron wire, about the size of a goose quill—then hold up with the fingers, the top skin of the neck of a distempered dog, and thrust the heated wire entirely through it, so that when you relinquish your grasp, two orifices, several inches apart, will be left on the sides of the neck. Through these issues a great deal of foul humor is discharged. This remedy has proved successful in thirteen cases in which it was used, in many of which, all the usual remedies had failed.

Why may not this remedy for dogs' distemper, be used in colts' distemper, in which case it would be proper, I presume, to make the issues under the throat where the usual swelling occurs?*

In reference to scratches or mange I have known every physic and liniment, such as arsenic, lard and sulphur, &c. to fail in many cases, in which the following application effected a speedy cure:—Mix well together fish or linseed oil and lampblack, and smear it on the diseased dog thoroughly, from "stem to stern," with an old paint brush. To be sure, your dogs cut queer figures after this application. So far from recognising one another by sight, they will for awhile act as though they did not know themselves—nor will they be very suitable visitants for the hall or parlor whilst under the influence of the application, but what are these trifles, compared to the restoration to health, of a favorite dog? Let me add that this application uses up the fleas in the shortest possible order.

A few weeks ago I had a noble and favorite horse writhing under the agony of the grub-worm. I gave him a table spoonful of wormseed oil in a gill and a half of spirits of turpentine, increased to a quart, by the addition of whiskey and water, and in about twenty minutes two table spoonsful of powdered blue-stone, in a quart of new milk. The horse soon appeared relieved, and in the course of the next ten or twelve hours discharged fifty or sixty grubs of the gadfly. The next day he was perfectly well. I think both these remedies good, but the wormseed oil is, I am sure, the most effectual. I have heard highly recommended for this disease a strong tea, made by boiling the bark or berries of the common elder—to be given and followed in twenty minutes by a purge. The sleekest, most healthy looking set of farm horses and mules I ever beheld, belonged to a gentleman, who had used oats, grown in land infested with blue thistle, for horse-feed. He assured me, that after using these oats, among which numberless prickles of the thistle were left by the fan, they passed multitudes of grubs and worms, which upon examination were found pierced with the prickles.

Yours, H.

Port Royal, Sept. 4, 1842.

The above comes from one who takes great delight in "horse and hound," and although he has not thought fit to append his name nor even his initials to his communication, he has no cause, that we know of, to be ashamed of either. As for his mode of curing distemper we would respectfully inquire if a sharp awl could not be well substituted for the hot iron. The wound would probably be less painful, and less liable to heal. If it is desired to continue the issue, we presume our friend is aware that it may be effected to any extent, by the introduction of a leather or other string into the wound.

* The seaton is frequently resorted to with great effect in colts' distemper.—Ed.

From the Tennessee Agriculturist.

MANAGEMENT OF CALVES.

There are many modes of rearing calves, and we suppose, every man thinks his plan best. That the public may have some correct data from which to judge of this matter, it would be well to know the different *old and new* methods of managing calves, and then some degree of certainty may be attained.

Not a few in England, and even in this country, separate the calves from the dams at a day old; this may be a cheap plan, but evidently it is not nature's course. Others let the calves remain with the cows till weaned. When this is the case, the calf sucks so frequently, the cow's udder cannot be filled or distended, and consequently, she gives so little milk, it is seldom the calf is more than barely kept from starving.—My calves have done quite well, and my plan has been substantially the following:

When the calf is dropped, the first object is to get it to suck, as the first from the udder of the cow, in this state, is indispensable to the health of the young animal. Next the cow is milked clean, and this is done twice every day,

after the calf takes its fill, till the dam does not give more than it will consume.

The calf is separated from the cow at about three days old, but turned to her three times a day till about three months old, when it is entirely separated from the mother, and fed, first, upon well boiled gruel, then mush, and so soon as it will eat, cut oats, bran and corn meal are given. The calves are to have green pasture in the mean time, and they have never failed thriving and growing as I desired them.

T. F.

MORUS MULTICAULIS.

The MORUS dies hard. It has been heralded forth as valuable for many purposes in its day. Amongst the last is its fitness for making writing paper. Some numbers of the National Intelligencer, it is stated, have been printed on paper made from this material. It is to be hoped that it will form a better article than some of the *rag* paper that has lately been in circulation.

We furnish to our readers the following extracts from letters received from the senior Editor, who has for some time been at the North, partly, on a tour of agricultural observation:

Boston, September 26, 1842.

Six days ago, on a clear, cold frosty morning, such as *we* generally experience about the month of December, I arrived in "old Bosting." There is an air of venerable antiquity about this place that contrasts very favorably with the freshness and glare of the eternal brick and mortar of New York. The old stone churches, with their antique forms, unknown to architecture, some of them still bearing the marks of revolutionary bullets, are infinitely more interesting than the proudest structure of modern times. The crooked and narrow streets, with the tall and majestic houses on each side, between which you look up as from the bottom of a well, and almost discern the stars at midday, are much more picturesque, than convenient or agreeable. Not having the sagacity of the primitive cows, whose paths, it is said, laid out the streets of the city, I have already lost my way about an hundred times, and not all the savory odor of the Tremont table, has enabled me to snuff my way home in time for dinner. If their ways are crooked, the people themselves appear to be straight forward, upright and honest, and if art has constructed their labyrinthine streets to perplex the stranger, nature has remedied the evil by bestowing an usual quantity of civility on the inhabitants. I have never seen a population that struck me more favorably. Although there is only about twelve hours travel between New York and Boston, so different is the character of the people, that one is almost inclined to imagine that he has been transported into another hemisphere.

They have here the finest assortment of agricultural implements I have seen anywhere. I have made a few purchases, but the very high, and I would add unnecessary finish that they bestow upon their implements, ploughs particularly, render them too costly for our market. I can buy as good ploughs, as strongly made, without the extra polish, for half the money. The fact is, two rival houses here have been carrying this thing of finish, considering the article upon which it is bestowed, to a ridiculous extent. The farmer wants a plain, substantial tool, and ought to be willing to pay for anything that adds to the durability or execution of his implements; mere ornament in such things he neither needs nor desires. I have seen ploughs here that would make handsome parlor ornaments. This rivalry of appearance too has led to another bad consequence. Every workman knows that the brasher the timber, the smoother it will work: hence, tough stringy pieces are deferred to old brittle stuff, that can be readily made to present a handsome finish. The castings are very excellent, and the fitting of the joints, upon which much of the strength depends, worthy of all commendation. The fondness of the people here for the beautiful art of horticulture has filled their warehouses with a display of implements unknown to us; hoes of all shapes, and of the highest finish, many intended for the use of ladies and children, pruning instruments, transplanting tools, and a thousand little articles, give to their agricultural stores an effect that is very striking. Have these facilities created the taste, or has the existence of the taste produced the facilities? I have determined to ascertain what the implements will do to arouse the taste, that I am sure lies slumbering in Virginia. What will the ladies of Richmond say when they hear, that I have been purchasing, not only flower roots for their gardens, but beautifully polished hoes for their delicate hands, and little spades for their tiny feet; they are all warranted—warranted to produce a bloom as fresh and charming as the flowers they are destined to cultivate.

* * * * * Yesterday I visited Mr. Cushing's and Mount Auburn, the living and the dead. Of the latter, I shall only say that it seems to afford very "snug lying," but as this is the *last* thing that a man needs in this world, and is by no means agricultural, I will pass on to Mr. Cushing's, of which every body has heard.—This is supposed to be one of the most princely establishments in America. The proprietor has, I understand, amassed an immense fortune in the tea trade, and has expended hundreds of thousands in ornamenting these grounds. They

are situated within six miles of the city, and such has been the number of visitants to this establishment, that Mr. Cushing has found it necessary to set apart one day in the week for their reception. Every Friday the gates are thrown open, and the grounds are crowded with ladies and gentlemen, to whom the most polite attention is shown. Well, it is all very fine, long gravel walks, shrubbery trimmed into shapes, and an elegant garden of six or eight acres surrounded on three sides by a high brick wall, a splendid iron grating ornamenting the front. A most elaborate and elegant green house occupies one side of the wall, whilst wall fruit is trained in various shapes against the other two. Here are walks, parterres, conservatories, brick walls, and iron railings, all very pretty to be sure; but to my unsophisticated taste, a fine extensive lawn, such as I have seen, with its green grasses and majestic trees, is worth a hundred of them. *De gustibus non est disputandibus*, as an old friend of mine used to say, but I could not help thinking, for how much less money than was here expended, Mr. Cushing might have purchased an elegant, well stocked James river estate, and lived a retired country gentleman, the balance of his days. I have seen something more of the world lately than I ever saw before, but I have seen no situation yet so enviable as that of a gentleman I know on James river, with his elegant and venerable old family mansion, his noble lawn, his beautiful park, his extensive prospect, not the least beautiful part of which is the broad acres of the proprietor, rolled out like a map before him, surrounded by his well fed, well clad, and cheerful negroes, to whom he is not less a protector and benefactor than a master. If there is a heaven on earth it seems to me to be such a home, and I would not exchange it for all the gewgaws and fripperies, that wealth and extravagance can afford.

However I may be inclined to fall out with Mr. Cushing's taste in the expenditure of his money, which, I reckon, he thinks more his business than mine, the disposition of the proceeds of this splendid property must secure for the noble proprietor the gratitude and esteem of every kind and benevolent heart. Not a dollar's worth is ever sold, but the whole of the surplus, after supplying the simple wants of a small family, is given to the poor. Some hundred acres in the highest state of cultivation, employing the constant labor of thirty hands, loaded with vegetables, fruits, and flowers, are devoted to those, to whom fortune has denied such blessings. Here is a use of princely wealth that does honor to America, whilst it should bring a blush of shame to the cheeks of the nobles of Europe.

The only thing I saw here particularly worthy of note, in an agricultural way, was the herd of cows; they consist principally of the Ayrshire stock, and one of them I noticed particularly as a splendid specimen. I am more than ever impressed with the belief that this is the stock best adapted to our soil and climate.

I saw here two men and four monstrous oxen employed in breaking up ground, that I thought would have been readily effected with two horses and a negro man, in Virginia. It may be that on this farm there is little attention to the economy of labor, but observation elsewhere has satisfied me, that an acre of ground can be broken up with a negro man and a couple of our sinewy, well bred horses, for one-third less expense, than the same work can be effected at the North. I will write you again soon.

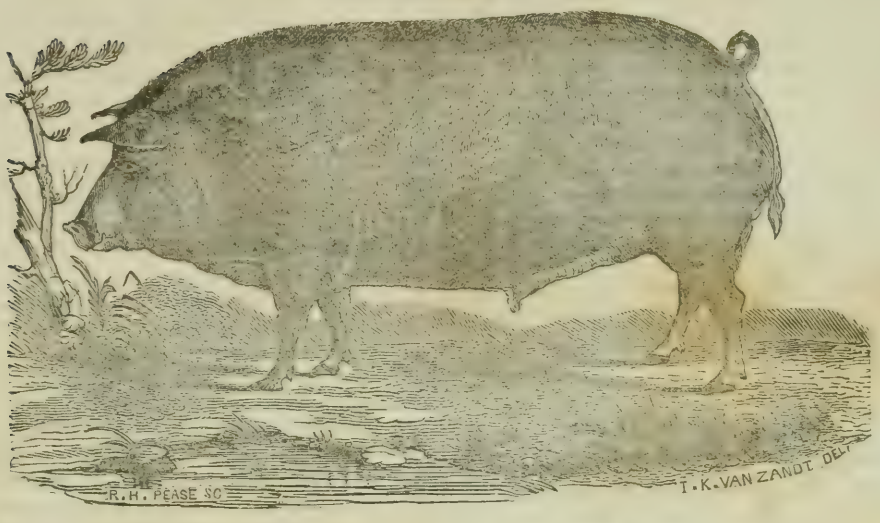
Yours, C. T. B.

GREEN CROPS.

We have frequently recommended the turning in *green* crops, but Professor Dana, in his muck manual, says, that "it is the experience of some practical men, that one crop, allowed to perfect itself, and then die, where it grew, and then turned in dry, is superior to three turned in green." He then proceeds to give the rationale of the fact, upon scientific principles. Now, this may all be correct, and yet, such is our opinion of the learned Professor's abilities, and such is our estimate of the state of agricultural science, that we doubt not, if the opposite *fact* had been stated to him, as it has been to us, that he would have been equally happy in explaining *it* on scientific principles. Without using any very hard words, to which very indefinite meanings are attached, we thought, that the green crop, after maturity, at least, contained all the principles that could belong to it when dried; although something might be subtracted, we did not see how any thing could be added; but the Professor says, that "green plants ferment—dry plants decay—a large portion escapes in fermentation as gas, and more volatile products are found than during decay. The one is a quick consuming fire, the other a slow, mouldering ember, giving off, during all its progress, gases which feed plants and decompose the silicates of soil." We had supposed that these gases evolved in fermentation, valuable in their character, were held and retained by the superincumbent earth, for the use of growing plants; but that when the crop was permitted to dry on the surface, these properties were evaporated and lost. At any rate, we believe we could find practical men to back us in our facts, and *professors* to sustain our theory with a plen-

ty of scientific terms. But we forbear, because, we see that Professor Dana's theory may lead to a result in practice, that, when convenient, we have often recommended; that is, to permit the crop to *cover* the land. As a shield from the action of the sun and air, we believe more is gained than is lost by the evaporation, that converts the green crop into a dry one.

RIP VAN WINKLE.



Three Hills Farm, Albany, October 13th, 1842.

Messrs. Botts & Burfoot, Editors of the Southern Planter:

Gentlemen,—On our parting at Albany on the 30th ult. I handed you, for insertion in your "Southern Planter," a cut of the prize boar, "Rip Van Winkle," with a promise to forward you some account of him, with which I now most cheerfully comply.

"Rip Van Winkle" will be three years old this fall, and I think you will readily admit "he is a *Berkshire*, every inch of him." His portrait was taken by Van Zandt soon after he returned from Syracuse, where he carried the first prize for the best boar exhibited at the Fair of the New York State Agricultural Society in September, 1841.

If there is any defect in the above portrait, it is in the legs, which I think are too small, and gives him rather a leggy appearance. He has bone enough to sustain six or seven hundred pounds, and it is the opinion of many that he may be made to reach the latter weight. His head, neck, and ears are to the very life, and his proportions are admirable.

Some of the finest pigs exhibited at our late Fair were of his get. I have testimonials from several gentlemen to whom I have sent pigs of his get, speaking in the highest terms of them. It was my intention to have exhibited him again at the Fair which took place on the 27th and 28th ult. and I had entered him for that purpose, but having previously disposed of him to Mr. John Bonner, of White Plains, Georgia, and receiving orders to ship him immediately, I sent him off a few days before the exhibition. Mr. Bonner also purchased my prize sow and two others for breeders, which, together with several he purchased of me last year, gives him great advantages for supplying pigs of the finest and purest stock. He spares no expense in procuring the best animals he can get, therefore applicants in that section may depend on procuring from him the "real Simon pures."

Caleb N. Bement.

We are very happy to welcome to our columns a name so distinguished as that of Mr. Bement. We hope this is not the last we shall hear from him; there is no man in this country, probably, who has sold more fancy stock, with greater satisfaction to the purchasers, than Mr. Bement, and there is no one we know of, upon whose judgment and candor we would sooner rely for a sound and fair opinion upon such a subject.

CABBAGES.

A writer in the "Agriculturist" states, that he succeeded in destroying worms and bugs infesting his cabbages by sprinkling them, with strong *soap suds*, when lime, soot and ashes had failed.

CAST-IRON BUILDINGS.

It is gratifying to learn that cast-iron is rapidly coming into use, as the principal building material for houses. In England, many dwelling houses are being constructed of this material, in a manner that will give them many advantages, beside being much cheaper than those built of stone. The walls are to be made of hollow sections, which will render them easily kept warm; or, if occasion requires, they may be easily taken down, and removed. The cost of a three story house, containing twelve rooms, is estimated at only $5,000. We should be pleased to see this mode of building introduced in this country, and will readily furnish plans, drawings and section-models, to any iron founder, who will introduce it. What will the enterprising Bostonians, say to the proposition?—*Am. Mechanic.*

PRESERVING ROOT CROPS.

Our northern friends certainly excel us in saving and preserving potatoes, turnips, carrots, &c. Something may perhaps be credited to their climate, but much more, we apprehend, is to be attributed to their superior habits of care and attention. The following excellent article is taken from Mr. Kendrick's new "American Orchardist," which is esteemed very high authority wherever it is known.

We would call particular attention to his remarks on *cooking* food for horses and cattle, for if he is correct, and he is supported in the opinion by many judicious farmers, it serves to prove how cautious we should be in encountering expense upon statements made in agricultural papers. The value of cooking has been testified to, whilst it was new, over and over again, and thousands have been expended in steaming and cooking apparatus. We would not be at all surprised if it turned out to be one of the humbugs of the day.

"Irish potatoes, if it is desirable to have them in all their excellence, should never have the sun shine on them after they are dug, and should be exposed to the air and light as little as may be. Potatoes pitted or buried in holes in the field, retain their freshness and good qualities much later than those put in open bins in the cellar; and the farmer will always do well to have a few pitted for spring use. The necessity for this may in a great measure be obviated, by lining the bottom and side of a bin with turf, and when it is filled, covering it in the same manner. Potatoes will keep perfectly sound and good for years, if placed so low in the earth as to have a temperature too low for vegetation. Experiments made in a compact soil on the north side of buildings or walls show that four or five feet will usually be sufficient; in a lighter or more porous soil a greater depth is requisite. No water in any case should stand on potatoes, as it will soon destroy them. If potatoes are dug and pitted early, there should be an opening made at the apex of the heap, and filled with a wisp of straw, to keep out the rain, but at the same time to allow the heated air to pass off.

"Turnips, ruta baga, &c. are among the easiest of roots to preserve. They should be left in the ground as long as consistent with safety from frost, then drawn and put in cellars of moderate or rather low temperature, or pitted in the field at once. The turnip will sustain a much greater degree of cold than the potato, without injury; but heat has a worse effect upon it, and in saving this root, heating is what is mainly guarded against. A hole made in the top of the pits with an iron bar, to be covered with a flat stone when the cold grows severe, will permit the heated air to pass off and prevent danger from this source. In the experience of a number of years we have scarcely had a turnip lost by frost or by heating, either when pitted or in the cellar; a proof to us of the ease with which this root can be secured.

"Carrots and beets, like the potato, require more care than the turnip, to prevent the effect of frost upon them. The best way we have yet tried upon them, is to pack them in bins or barrels, and strew fine earth among and over them, to exclude the air, and preserve a uniform temperature.

"If your pigs have had the run of your orchards in September, they will be found doing well in October, and afford proof that apples are worth *something* to the farmer when not made into cider. The cheapest mode we have yet tried in fattening hogs is with apples and potatoes steamed, always finishing with good ground food, such as corn, peas or barley. All food given to the hogs should be cooked; fruit and roots by steaming; grain or meal by boiling. If the latter is not convenient, the grain or meal should always be well soaked or mixed a little, it will be none the worse for it. Farmers who feed dry corn and peas to their pigs, pursue a very wasteful course, as they may easily ascertain by experiment. Where corn is fed, there is a great saving in having it ground in the cob, and particularly when fed to cattle or horses. From what we have seen, we think there is less

advantage in cooking food for horses and cattle than for hogs, and that with such it rarely repays the expense. Grinding, however, where economy is consulted, will always be practised."

ROOFING.

A writer in the October number of the "Agriculturist" who claims to be a carpenter, and as such to have had much experience in building, asserts, that shingling upon laths will last 33 per cent. longer than on sheeting. He, moreover, urges the superior lightness of the roof and the consequent decrease of pressure on the walls, as a great advantage. The superior economy and lightness are evident, and we think it is hardly less certain, that the more the under side of the shingle is exposed to the air the longer it will last.

FRICTION PASTE FOR WHEELS.

The best composition that can be prepared, to relieve carriage wheels, and machinery from friction, is composed of hogs' lard, wheat-flour, and black lead (plumbago.) The lard is to be melted over a gentle fire, and the other ingredients—equal in weight—may be added, till the composition is brought to the consistency of common paste, without raising the heat near the boiling point. One trial of this paste, will satisfy any one, of its superior utility.—*Am. Mech.*

If the black lead is considered too expensive far common wagon use, great economy will be found in making a paste of common grease by the admixture of flour, which prevents its melting and running away as soon as applied.

BRIERS.

To the Editors of the Southern Planter:

Gentlemen,—I have seen some notices in your paper recently concerning the *destruction* of *briers*, and with your permission, I will give you an account of a discovery which I accidentally made.

Intending to give to ten acres of land an extra preparation for corn, I had it ploughed last fall, and this spring it was ploughed again, followed by a subsoil coulter in each furrow after the plough. This piece of ground was very much infested with briers. The subsoil coulter being put deep into the earth passed under the roots of the briers and brought out the entire bunches of roots to the surface, leaving scarcely a vestige behind. I would remark, the coulter was square on the front and nearly an inch thick; consequently the roots were not cut but actually pulled out of the ground. So large was the quantity of roots thus pulled up, before planting the corn they had to be thrown into large piles and burned.

The first working the corn had after planting was with cultivators, which completed the destruction of the briers, pulling out the broken roots left by the coulter. I examined the piece of ground a few days ago and could scarcely find a brier at all.

Any of your numerous readers having land infested with briers, need only give this plan a fair trial, and I am convinced it will be attended with the same gratifying result.

I remain yours, truly,

GEO. WOODFIN.

Richmond, 14*th Sept.* 1842.

SPONTANEOUS COMBUSTION.

It is said, that linseed oil, coming in contact with cotton or sponge, will frequently in a few hours produce spontaneous combustion.—Dead men tell no tales, and burnt houses, if they could speak, could, we doubt not, tell many a tale of fire arising from spontaneous combustion.

For the Southern Planter.

HAY—NEGLECTED IN LOWER VIRGINIA.

In the course of my travels in lower Virginia, I have very frequently expressed my surprise that the farmers in this part of the State h v e not turned their attention to *making hay*. The article is but rarely seen in many of the counties below Richmond, at least as far as I am acquainted, except what is shipped from the North. A few farmers, here and there, raise clover for the purpose, and some others, who reside near the water courses, mow the natural growth of the marshes, which is, however, a coarse article, and is not very well relished, it is said, by horses and mules. But, notwithstanding the making hay of clover and marsh grass, it may very emphatically and correctly be said, that lower Virginia *is not a hay country*. The question now arises—Is there a want of adaptation in the soil or climate of this part of the State, to the cultivation of grasses for hay? Or does the almost entire *non-existence* of these desirable and profitable productions in Eastern Virginia, originate in some other thing, as want of *knowledge* in these matters, or want of *enterprise* to put into practice whatever amount of knowledge may be had upon such subjects? I cannot say that I speak from my own observation or certain knowledge of what I have seen in the way of hay growing and making in this part of the country, when I express almost unlimited confidence in the adaptation of many of the lands down here, to the cultivation and growth of grasses; for so little

attention is paid to such things here, that no one can exactly know what the lands would do, if a fair trial were given them. But from the nature of the soil in many places, compared with that in other parts of our State, where I have seen the most luxuriant meadows, and from the *quality* and *quantity* of the native grasses which it yields spontaneously, I am led unhesitatingly to conclude, that a large portion of the lands in Eastern Virginia would produce excellent hay, and that if they were cultivated in this, they would be far more profitable to the owners, than in any other way. A large portion of the lands to which I allude, are not cultivated in any way whatever. Hundreds and thousands of acres of low, swampy lands, at present uncultivated, might, without much expense, be made to yield luxuriant grasses of different kinds. As the native grasses are so exceedingly fine, it is fair to infer, that other kinds, as timothy, herds and orchard grasses, would do well in many of the same lands, if they were suitably prepared for them.

A good meadow, when once in order, will generally yield more to the farmer, than the same piece of land would, if cultivated in almost any other way, and that perhaps with less labor. A meadow, once made, does not require the plough and harrow like the corn and wheat crops, but will remain for years. The labor of mowing, curing, and putting by the hay, is tolerably heavy and warm work while it lasts, but it does not last long.

The average yield of hay to the acre, on lands suited to it, is about four thousand pounds, or two tons. Now this amount at fifty cents a hundred would be twenty dollars—and hay is often worth much more. Twenty dollars an acre from lands that are now suffered to be almost if not quite profitless, would be great gain indeed: for it is upon many of those lands that are not cultivated at all, that grasses might be raised with the greatest success.

These general and unconnected remarks are made with the hope that they may lead to the discussion of the subject, and eventually to the successful and highly advantageous cultivation of hay. * * *

Isle of Wight, August, 1842.

LIME.

We see it recommended upon the authority of Mr. Raymond Baker, in England, to apply lime to land and turn it under in its quick state; to do which it must be carried out *immediately* after burning. From the heat evolved, he says, during the slacking of the lime under ground, and its causticity, which diffuses itself by the agency of the moisture it meets with through the soil, it will be found to destroy, or at any rate to be extremely obnoxious, to wireworms, slugs, grubs and other enemies, which the farmer has to contend with and which are very frequently the cause of failure in his crops, as well as to render most vegetable matter in the soil soluble and food for future crops. This, we believe, is endorsed by the Royal Agricultural Society, and we may be considered sceptical for doubting the advantages of it; but in the first place, this mode of application is attended with very great difficulty and inconvenience, for such is the attraction of lime for moisture and carbonic acid, that the slightest exposure to the atmosphere converts it into the carbonate. Again, lime comes from the kiln in lumps, and consequently cannot be as readily spread and distributed as when it has been reduced to powder by slacking; but suppose your lumps with great care and expedition to be preserved in the quick state, and spread equally under the surface, the moisture of the earth, probably in fifteen minutes, converts it into a mass of slacked lime and may possibly in the operation scorch a few bugs that have not sense enough to withdraw from the heat. But we think, with all due deference to the Royal Society and Mr. Baker, that it would be about as cheap to catch them, and tickle them to death. In sober earnestness, we are afraid that any advantages of this mode are more than counterbalanced by the extra difficulties of hauling and spreading that it includes.

For the Southern Planter.

SWAMP MUD.

Messrs. Editors,—Mr. R. G. Morris, of Buckingham, in your August number, speaks very favorably of river mud as a manure. I have no right to question the statement of Mr. Morris; but similar experiments have been made under my observation with *swamp mud*, and I regret to say that the effect cannot be seen. I once saw on a lowground lot a thick top dressing of deposite from the bottom of a mill pond either at the time it was done or years afterwards. And I have frequently removed small portions of mud from swamps and ditch banks after it had been well pulverized with the frosts of winter and spread it broadcast or put it in the hill, and have not been able to perceive the advantage. I have observed that ditch banks whlie elevated on the margin of the ditch invariably produce well, even when much clay had been thrown out in the mass, and yet when the richest of these banks have been removed

and spread in other places or put abundantly in the hill, they will not produce. I am surprised at this and am anxious to know the cause, as I have several bogs that I wish to use in this way. Perhaps you or some of your correspondents can explain the mystery.

> Some act upon this selfish plan,
> Say nothing, but hear all they can;

Therefore I will add, by way of atonement for the trouble I give you, an infallible rule or recipe for keeping sweet potatoes. Had I known it, and my father before me, we might have saved many a fine crop and been spared much trouble and disappointment. Have a dry cellar under your house, put down plank for the bottom, put in your potatoes fresh from the field, and line them well at the sides with dry oak leaves from the forest, and when your heap is made, cover them with the same.

Respectfully yours, &c.

A Subscriber.

We wish much that the writer of the above had thought fit to append his real name to his communication instead of leaving it as he has done for private inquirers. He says he does not wish his name published because it is not of sufficient importance to give weight to any doctrine or theory; but he is stating important facts, which are of course invalidated by coming from an anonymous source, especially when they are contradicted by statements over real names. So much injury has been done by anonymous misstatements, that we have determined to publish no important facts for which we have not the authority of a name. These remarks do not apply to this communication because we have the author's name; we only regret that false delicacy prevented his giving it to the public.

For the Southern Planter.

HILL-SIDE DITCHES.

Messrs. Editors,—Believing as I do most sincerely that horizontal or hill-side ditches are a most efficient auxiliary in the cause of agricultural improvement, I have been somewhat surprised that nothing has appeared in the Planter upon that subject. I am aware that prejudices exist on this as on many other subjects; but candidly believe them founded in error. To me these ditches have been invaluable in preventing the formation of gullies and in filling up those that were already formed. Nor have I found them expensive to cut or troublesome to keep in order. During the past summer we have had some very hard rains, and yet not one of my ditches has broken, nor is my land injured by washing. The following hints are designed for those of your readers who know nothing about them—those who are familiar with them, will, I trust, be induced to correct my errors and give us something better on the subject.

The Level represented in the ninth number of the last volume of the Planter, is a good one, except that it would be more handy to have it ten feet with a fall of two inches. To which, and the instructions there given by "A Drainer" I would respectfully refer your readers. Having supplied yourself with a proper level, repair to your field at some leisure time, accompanied by a servant, hoe in hand. Carefully survey the field—observe the bottoms most liable to wash; at the head of these, just where the hill begins to decline, some few feet above where it shows a disposition to wash, plant your level. Whilst you are raising or lowering the shortest leg to the line to fall in the mark the servant will make a chop or two just behind the longest leg. This done, move the long foot to where the short one stood before, and whilst adjusting the line, the servant will continue his chops as before.—Thus proceed till you reach some branch or bottom into which you wish your ditch to empty. Your ditch being marked off to suit you, (if not, try again,) your plough will commence where you did, following the chops made by the servant. Widen and deepen sufficiently with this, then with your hoes, beginning at the lower end, draw out the loose dirt and form a good bank. Some fifty or seventy-five yards lower down the hill, construct another, and then more if needed.

To keep these ditches in order it will be necessary for the master to walk through them occasionally and throw out whatever may have fallen in calculated to choke them; and if he takes his hoe with him sometimes it will perhaps be the better for him and them too. One objection to these ditches is that they somewhat obstruct the passage of carts and wagons through the field. This difficulty may be obviated by exercising a little judgment in their location.—It is not often necessary that a ditch should run entirely across the field. One may commence at a certain point near the middle of the field, and run in a certain direction—the other may commence a few feet from the first, either above or below it and run in an opposite direction, thus forming a gap through which wagons may pass.

I am aware that a correspondent of the "Farmers' Cabinet" has characterised the article of "A Drainer" as about as strange a jumble of ideas as could well be "squeezed into so small a space." Perhaps this effort of mine may be quartered in some corner of the same "nutshell" if it happen to be seen by that writer. Notwithstanding a dread of such a squeezing, I am yet prepared to assert that a less fall than two inches in ten feet will not carry off the water in

high land ditches, though it might answer in underdrains. *To cut* a ditch it is necessary to begin at the lowest point—to lay it off it is often necessary to begin at the highest. For instance, we sometimes find a wet spot on the side of a hill. To lay this off we commence with the level near the upper part of it, and proceed down the hill—to ditch it we begin at its mouth and proceed towards its source.

With "A Drainer" I have no acquaintance, except that formed through the medium of the "Planter." Though he thought proper to withhold his name, I wish he had given us his *locality*.

Your friend,

P. B. White.

Nottoway, October, 1842.

SMALL FARMS.

The cultivation of too much land is the besetting sin of Virginia and the South. By this, we do not mean that any system is desirable by which the cultivation of the country is broken up and divided amongst small proprietors; for in agriculture, as in every other art, there are many advantages in a concentration of capital and an extended scale of operations. Expensive labor-saving machines may be procured by the large farmer that cannot be afforded by the small proprietor, and a thousand other facilities, lessening the cost of production, are within the means of the one that are too costly and expensive for the other. But extensive operations can be carried on on much less land than is commonly used for the purpose, and we believe that fifty hands may be more profitably employed on five hundred, than on a thousand, acres. To keep every thing neat and clean on five hundred acres and to carry the cultivation of every acre to the highest point that profit will justify, will occupy a force that is generally given to a much larger space.

Since the eyes of our people have been opened to the defects of our agriculture, a very general desire for improvement has arisen—but the means are wanting. We are told daily and hourly, I should like to improve my farm—I am satisfied it is folly to cultivate poor land, but I have not the means. And this is said too by men, who own eight or ten hundred acres of land, that will sell for five or six dollars an acre. Suppose they were to sell four hundred acres for two thousand dollars, and use it in obtaining proper tools and fixtures for the other four hundred, would not the product of the half be quadruple that of the whole? Oh yes, but then they would not be such extensive landed proprietors. Ah! this it is that lies at the root of the evil, the overweening pride of being considered extensive landed proprietors. They may be as barren as the desert of Arabia, but it sounds so well to be known as the proprietor of a thousand acres, and it looks so "pitiful" to own only two or three hundred. Until this false pride is eradicated we can never have good farming, and with Mr. Durand, in the last number of the "Cabinet," we esteem amongst the greatest blessings of this life

> "A little farm well tilled,
> A little house well filled,
> And a little wife well willed."

For the Southern Planter.

CURE FOR DISTEMPER OR MURRAIN IN CATTLE.

Take a handful of peach leaves, same quantity of the bark of dogwood root, same quantity of sheep-mint, roots and tops, and as much of the roots and tops of the golden rod as can be grasped in the hand, put the whole into five or six gallons of water, and boil down to about a gallon and a half, so as to make a strong decoction. Give one quart of the decoction every two hours, with a heaping tea spoonful of saltpetre in each quart, until the animal begins to get better; after which, the doses must be given less frequently and diluted with water. The next day, some of the decoction, diluted with two or three times its quantity of water, may be placed within reach of the animal, which is to be kept from water, entirely, for two or three days.

The above remedy was sent me by the Hon. J. W. Jones. I applied it forthwith to a large ox then lying, never to rise, as I thought. On the third day, in the morning, the animal was upon his feet, the fifth day he was chewing his cud, and is now ready for the cart.

Samuel Hobson.

Cumberland County, October 11, 1842.

For the Southern Planter.

Fluvanna, Sept. 19, 1842.

Messrs. Editors,—I have been a constant reader of the Southern Planter, and think it worthy of the patronage of every farmer and planter in the country, and although I am no professed writer, yet I have thought proper to make you acquainted with my mode of raising turnips.

In the spring I select the land intended for the crop, and commence penning my cattle on it; in the month of April or May I plough it, and

repeat the operation several times between that and seed time, so as to keep the ground clean and stirred, (omitting to pen the cattle on it when very wet.) In the first week in August, (or as near that time as possible) when I can get the land moist as well as fine, I sow between a half pint and a pint of seed to the acre; after which, if the land is not sufficiently rich, I put on rotten manure of any kind, so as to make it rich, and then harrow it over; when done, I cover it moderately thick, with straw, chaff, or green brush, (which ever may be most convenient. The covering protects the plants from the fly and intense heat of the sun, which often proves fatal to the crop. It also keeps the land moist and prevents the heavy showers from running the land too close together; nor do I uncover until I take off the crop.

In raising my seed, I select, when I take them up, such as I like to raise from, and set them out in a trench, and cover them sufficiently to keep them protected from the frost and snow; or I keep them on the land and raise the earth about them so as to keep them from freezing, and put them out in February; either will answer the purpose.

I had intended to give you this anonymously, but as I see a premium of £20,000 has been offered in England for a preventive for the turnip fly, and as I feel confident of securing it by this method, I wish you to have my name entered as one of the competitors.

Yours, T. C. Noel.

PLASTER PRODUCING RUST.

Since we printed Mr. Peyton's letter, with which our number opens, we have received the following, which he intended to be appended, as more full and satisfactory than the postscript that is subjoined. The interest Mr. Peyton takes in this important subject, and his indefatigable exertions to gather facts from authentic sources, (after all the only true foundation of knowledge,) entitle him to the thanks of the agricultural community.

Lynchburg, October 29, 1842.

Messrs. Editors,—Since I wrote you last, I have learned some facts which throw light on the subject of Rust and Plaster. In travelling to this place a few days since I met with an intelligent farmer of Bedford who informed me that a great many of his neighbors sowed plaster on their wheat during the past season, and that in every instance the plastered wheat was more seriously injured by the rust, than that which was not plastered. In Lynchburg I fell in with Mr. Massie, of Nelson, a gentleman of considerable agricultural experience and whose principal staple is wheat, sowing as he usually does from five to seven hundred bushels annually. He states it as his conviction and that of the farmers around him, that the application of plaster increases the tendency to rust. He gave me the details of an experiment which he instituted to test it, which was almost conclusive. In sowing a field of wheat through which a ridge of thin land passed, he plastered the ridge alone. At harvest all except the plastered portion was *slightly* affected by the rust, while *it* was entirely ruined. The repeated failures of the wheat crop some years back on the Oak Ridge estate of Mr. Rives, he thinks was correctly attributed to the excessive use of plaster. I give these as incontestable facts, derived from authentic sources, and which will be useful to the public in forming a judgment in this matter.

W. M. Peyton.

IMPROVEMENT OF SOILS.

The subject of renovating soils by means of broadcast corn, instead of clover, has for some time engaged our thoughts; and we are convinced that it will be found by far the best of all crops ever yet tried for that purpose. The fact that the stalks of corn contain so much larger a proportion of those soluble salts known now to be the chief nutriment of plants, and the fact that such a vast quantity of corn stalks and fodder can be produced, (eight to ten times as much as of clover,) seem to leave little doubt on the subject. These facts are at least sufficient to induce every farmer to try the experiment on a pretty liberal scale, and with very little delay. Mr. Taylor, the distinguished Virginia farmer, long ago tried the experiment, in an imperfect way, but with decided success.—His method was to plant his corn in the usual way, and, after pulling the corn, (which he did before it was fully matured,) to plough a deep furrow, and then cut and cover up the corn stalks. The next year he planted on this furrow, and buried his corn stalks as before. Thus, in five or six years, without any rotation of crops, he succeeded in producing from forty-five to fifty bushels of corn to the acre, on the poorest pine-land. Had he sown his corn broadcast, he would have brought his land to a far higher degree of fertility in a much shorter time. Our correspondent states the well authenticated fact, that 217,000 pounds of corn, in its green state, has been produced to the acre. Those who have seen thick-sown broadcast corn growing will have little difficulty in believing this. Many farmers may have observed that corn, especially when young, grows much more luxuriantly where it is thick than where only one or two stalks are growing. This same luxuriance is witnessed in the broadcast corn. About the middle of May we sowed in corn, very thick,

two acres of worn-out ground that had refused to produce rye, throwing a few loads of manure over a part. Wherever the ground was manured, the corn has grown with great luxuriance; surpassing corn in a neighboring field of new rich land, planted earlier and four or five feet apart. Even where no manure touched the ground there is now a heavy covering of corn, much heavier, apparently, than we ever saw of clover. It is our intention to cut this crop for fodder, and then sow again and plough in the second crop in autumn.—*Dollar Farmer.*

CENTRE DRAUGHT PLOUGH.

We present our readers with an engraving of the Centre Draught Plough of Prouty & Mears, Boston. There is no agricultural implement of such general use as the plough, and none in which greater improvements have been made in modern times. There is a great contrast certainly between the beautiful light *centre draught*, and the forked stick, or its successor, the wooden mouldboard. We have carried the manufacture of the plough to a great extent in this country, and we were assured a few weeks since by an intelligent English farmer, that our ploughs very far excelled those of his own country, notwithstanding the higher price paid for the latter. Of American ploughs, none have obtained more celebrity than those of Prouty & Mears. We believe they have taken the highest premium at the most thorough trial ever made in this country. They were particularly recommended for their superiority of execution and lightness of draught, turning the furrow slice over flat, instead of setting it on edge. The very high and, we think, unnecessary finish bestowed upon them, put them at too high a price for our market generally, but we shall keep samples of them, and will fill any orders that may be given for them.

HOW TO COOK GREEN PEAS.

The common method of cooking this delicious vegetable, by boiling in water, is nearly destructive to its flavor, at least so says a lady, who has sent us the following method of preparing them for the table, which, after experience, we must add, is a great improvement: "Place in the bottom of your saucepan or boiler, several of the outside leaves of head sallad; put your peas in the dish with two ounces of butter in proportion to half a peck of peas; cover the pan or boiler close, and place it over the fire; in thirty minutes they are ready for the table. They can either be seasoned in the pan or after taken out. Water extracts nearly all the delicious quality of the green pea, and is as fatal to their flavor as it is destructive to a mad dog.

AGRICULTURAL EXHIBITION.

Unfortunately we were detained at the North too long to be present at the exhibition of the Henrico Agricultural Society held on the 19th and 20th of October. We are, therefore, indebted for the following extracts to those faithful chroniclers, Messrs. Cowardin & Davis.

The mechanical part is one of the most beautiful and interesting features in these exhibitions. We esteem it especially because it is so well calculated to develop and give publicity to the real merits of Richmond manufactures. People abroad are entirely ignorant of the extent and quality of our productions, many of which will compare favorably with the best of Europe or America. Indeed our establishments being comparatively new, are provided with the very latest improvements in machinery, and in this respect are far ahead of those that are older and better known.

THE AGRICULTURAL SOCIETY—ITS EXHIBITION AND PREMIUMS.

We promised a more detailed accout of the proceedings of the Agricultural Society of our county, and the exhibition under their auspices. We spoke in general terms of the character of the admirable display in the Exhibition Room at the Exchange. What we said could convey but a faint idea of the reality, and was but a feeble tribute to the taste, skill, industry, and ingenuity, there exhibited. Let us hope that the excellent Society, which has thus drawn forth from the quiet homestead the lovely specimens of patient toil, and the delicate fashionings of the better part of our species, may every year add new beauties to its exhibitions, and give additional evidences of its prosperity and beneficial results, to elicit our admiration and gratitude.

The greater part of the day, Wednesday, at Goddin's Tavern, was occupied in the deliberations of the Society on their business matters. After they were concluded, the following premiums were awarded:

For the best stallion calculated to produce stock adapted to the saddle, harness or draft, $15—to Thos. H. Taliaferro, of King William.

For the most highly improved and best cultivated farm, $25—to Gen. Wm. H. Richardson.

For the second best, $20—to Anthony Robinson, Jr.

For the third best, $15—to Richard Whichello.

For the fourth best, $10—to Thos. Ginnett, [the cripple who excited so much interest at the fall meeting last year, and whose industry and astonishing labors under his physical disabilities, caused the Society to give him a premium as a mark of their approbation.]

For the best field of corn, $15—to J. W. Tomlin.

For the second best, $10—to A. Robinson, Jr.

For the third best, $5—to Thos. S. Dicken.

For the best crop of Irish or sweet potatoes, not less than half an acre, $5—to James Gordon, produce sweet potatoes 544½ bushels to the acre.

For the second best, $4—to Joseph C. Burton, produce 392 bushels Irish potatoes to the acre.

The exhibition the first day, was of course neither extensive nor interesting, as there were no premiums offered for cattle, and the exhibition for the greater number of premiums being arranged at the Exchange for the second day.

Messrs. Botts & Burfoot exhibited their excellent straw cutting machine; and Mr. Jabez Parker produced a cutting box with a single knife, decidedly the best of the kind we ever saw.

The cattle brought on for sale were greatly admired.

The premium vegetables were very fine.

Mr. James Winston exhibited a sugar beet that beats all nature in the beet line. It weighed 25½ lbs. and looked sound and healthy. We think this "beats the beater."

Mr. O. A. Strecker exhibited several pairs of rare and beautiful pigeons, imported by him.—The pigeon, as emblematical of beauty and innocence, has always ranked among the favorites of mankind. In eastern countries they are not only regarded as objects of religious superstition but held in veneration as the harbingers, or the emblems of peace and love. Extraordinary high prices have been paid for the most esteemed species, viz: the carrier. From the earliest times the pigeon fanciers of London have had a club, in which premiums are awarded, and the notable science of the fancy, through the method of crossing colors and forms, is promoted

and perpetuated. At different times, laws for their protection have been made by the English government.

The two most remarkable kinds exhibited by Mr. Strecker, were the *Fan-tail* and *Jacobin*.—The *Fan-tail* is a beautiful bird, with a broad tail like a fan, slender necked, full breasted, and carries its tail gracefully. The *Jacobin* is more scarce than the Fan-tail. It is a small and pretty bird, with a range of inverted feathers on the back of the head, somewhat like the cowl of a monk, or the ruff of a cavalier. They were greatly admired. Mr. S. has quite a variety, embracing some that perhaps are nowhere else to be met with in this country.

Several fine horses were brought forward as competitors for the premium. Mr. George Taylor exhibited jacks and jennies of an approved blood.

A number of fine hogs were brought for exhibition and sale.

Thursday the following premiums were awarded at the Exchange, by the President of the Society, after the address of Mr. Bassett:

For the neatest and most substantial counterpane, $6—to Mrs. John J. Dickinson.

For the second best, $4—to Mrs. Wm. Miller.

For the neatest and most comfortable mattrass, made at home, $5—to Mrs. Dr. Gaines.

For the best bed quilt, $5—to Mrs. E. B. Selden.

For the second best, $3—to Mrs. J. M. Anderson.

For the best table cloth, $5—to Mrs. George Woodfin.

For the second best, $3—to Mrs. Maria E. Parrish.

For the neatest and most substantial carpet, not less than 10 yards, $6—to Mrs. John J. Dickinson.

For the second best, $4—to Mrs. S. Redd.

For the best hearth rug, $5—to Mrs. Lowndes.

For the second best, $3—to Mrs. R. M. Burton.

For the best specimen of stockings, socks, &c. $5—to Mrs. R. M. Burton.

For the second best, $4—to the Female Orphan Asylum.

For the best specimen of domestic silk, the production of the exhibitor, $5—to Mrs. Wm. W. Dickinson.

The committee appointed to award the above premiums at the exchange, called the attention of the Society particularly to elegant specimens of worsted work, by Mrs. Dr. James Bolton and Mrs. Chas. Marx, and to a counterpane of great taste and beauty, by Mrs. John J. Dickinson, all of which they recommended for premiums. Several premiums had been advertised for articles which were not shown, while a vast number of the finest fabrics were produced, for which no premiums had been offered.

For the best specimen of plants, shrubs, or flowers, $10—"to Miss Excy Gill," say the committee, "on account of the variety, rarity, and luxuriance of her flowers and shrubs."

For the second best, $5—to Messrs. Heydecker & New, say the committee, for the care and taste they have displayed in the culture and management of their flowers and plants.

The committee to award the premium for the flowers, reported that they could not pass over Mr. Rennie's selection without awarding to him their warm approbation for the flowers he exhibited. They also remark that the collection exhibited by Mrs. Woodson Pleasants was very beautiful,—they were not offered for premium, but only to lend beauty and embellishment to the scene.

Mrs. Dr. Gaines sent several beautiful specimens of household arts, embracing quilts, rugs, embroidered over-shoes, &c. So did Mrs. Maria E. Parrish. These ladies exceeded the others in the variety of their articles. But all deserve the highest praise for the excellence and beauty of the specimens contributed to make the admirable display. The worsted and the embroidery work, and the rugs, would vie with choice foreign fabrics.

We were delighted with the incident of awarding a premium to the Orphan Asylum. The parentless and interesting little artificers sent many specimens of their handiwork, which show that in the noble institution, under whose outstretched wings they are sheltered, their instruction in these useful pursuits, which must fit them for the duties of their maturer years, is not neglected.

Miss Nelson sent beautiful embroidered ottomans, one of them by a little girl some ten years of age, displaying extraordinary skill and taste.

Mrs. R. P. New sent fine specimens of wax fruit.

The pickles and preserves were excellent—equal if not superior to any of the West India articles. Pickles by Miss Excy Gill and Mrs. Goold, were surpassingly fine.

Mr. Strecker sent merely for exhibition several cases of American birds, finely prepared for the Berlin Museum, by Mr. Trott.

Shoes.—The specimens of these were of a first rate quality. Messrs. Hubbard, Gardner & Co. exhibited some of their excellent plantation shoes. Mr. Hill (late Cook & Hill) produced a lot of very superb workman's shoes and brogans, made very strong and faithfully. All these specimens were such as are never imported here. Messrs. D. B. Franklin & Co. exhibited specimens of their ladies' shoes, of the most delicate shape and finely finished, all "home made." These fine specimens must add great force to the claims of home industry for support.

Messrs. Morse and Maddox exhibited a beau-

tiful Rose Wood Piano, of their own manufacture, the tone of which was clear, soft and full. This fine instrument did the manufacturers great credit. It was much admired, and the fact that it was manufactured in Richmond, occasioned general surprise and sometimes incredulity. We learn from the gentlemen that they have met with good encouragement. Bravo, Richmond manufacture!

John M'Connell, Dentist, exhibited a case of teeth, fixed on plate and with springs, remarkable for the mechanical skill and ingenuity with which they were arranged.

Mr. Benjamin F. Kern exhibited a large show case of surgical and dental instruments, fashioned with skill and of exquisite polish. This is a new kind of manufacture for our city.—Heretofore any thing necessary to be done in this line, had to be ordered from the North, and our surgeons have consequently often been put to great inconvenience. We commend Mr. Kern to their support and encouragement. His establishment is on Governor street.

Mr. Cumberson produced some of the finest locks ever manufactured any where. Among them was his ingenious and impregnable bank lock, which we sometime ago noticed.

Mr J. W. Randolph exhibited superb blank books, from his bindery establishment.

The articles manufactured in our city, that were exhibited, caused great astonishment by their excellence; and we thought our manufacturers deserved a severe reproval for not contributing more liberally to the exhibition. Were they to enter cordially into the matter, and send such articles as they can manufacture, to be exhibited, a display could be made by Richmond which no stranger would think possible. We do hope they will do this at the next meeting.

The prospects of the Society are good. The scheme of making it a State Society is seriously entertained by influential gentlemen who advocate the step with much enthusiasm. Let the Society be encouraged, be it state or county. It will pay back fifty and a hundred fold all the efforts and means bestowed upon it. Let the motto be "*persevere!*"

We are indebted to some friend for a copy of the address delivered by our old friend, the Hon. James M. Garnett, before the Agricultural Society of New Castle County, Delaware. From this address we make the following extract:

"Permit me here to notice two other obstacles to the progress of American Husbandry, which I fear, can never be entirely overcome, for they seem to be a part of our nature. They are two besetting sins, which, although entirely opposite in their nature, and affecting two very distinct classes of our brethren, produce equally pernicious effects, and thus retard that advancement in all the branches of rural economy, which, but for them, we should certainly make. The one class is characterised by a marvellous fondness for, and tenacity of their own crude, come-by-chance, dogmatic opinions; the other by a too ready credence of the opinions of others, but especially of those whom they consider scientific men. The first are incorrigible believers in what they call '*book-learning*,' being a certain preventive to every thing like good farming; and that all they see about agriculture in what Tony Lumpkin styled, '*your print-hand*,' is nothing more than a parcel of lies or idle fancies. Hence the attempt to prevail on them to study agricultural books or papers to improve themselves in their professions, if listened to at all, will usually be met by an incredulous stare, or a mingled smile of ineffable pity and contempt, as much as to say, '*save your breath to cool your porridge.*' *do you think us a parcel of gulls and fools?*

"The other class, on the contrary, are always ready to jump to conclusions before they well consider the premises:—they are great theorizers, incontinently fond of any thing having even the semblance of an ingenious, scientific theory; and consequently are prone to be led away by any will o' the wisp talker or writer who claims to be the discoverer of something spic and span new in husbandry. They infinitely prefer to be publicly announced as the inventors of a *new* system, to the solid but less attractive reputation of being the improver of an *old* practice; and would much sooner spend their time in classifying and giving hard names to the innumerable insects that infest our crops, than in laboring to discover effectual means for destroying them.—Between the two classes our agriculture has suffered, and is still suffering more, I fear, than can soon or easily be remedied. The first class have their minds, as it were, hermetrically sealed against the universal truth, that the man who means to succeed, either in agriculture or any thing else, must always be open to conviction, and be ever ready to give a fair and accurate trial to all sorts of experiments which hold out a rational promise of success; taking care, at the same time, not to hazard more labor or money in making them, than a sound discretion will justify. The latter class, on the other hand, have *their* minds too open for the reception of every professed novelty, either in science or practice which may be presented to them. Our ne plus ultra brethren usually end their lives much as they begin them, at least in regard to the knowledge of their profession; and if no other farmers but such as themselves had ever existed in the world, mankind would still be much in the same situation in regard to husbandry, as the first teachers thereof found them to be in. But if impregnable obstinacy has kept them stationary in their vocation,

or nearly so; too great precipitancy in the laudable pursuit of professional improvement has much retarded their hop, skip and jump brethren in attaining the object of their wishes. Although a moment's reflection would convince them, that in no profession whatever can hasty, careless, inaccurate experiments lead those who make them, either to sound theory or practice, they never will command patience enough to make any other; and of course, very generally waste both time and their money, without gaining any thing but disappointment. To this cause chiefly, we owe all the numerous changes which have occurred, from time to time, both in the theory and practice of agriculture; and to this also, I believe we may truly attribute the various conflicting systems in regard to this most ancient of all arts."

Mr. Garnett has well described two great classes to be found in every agricultural community. Between the two, it is almost impossible to obtain *facts*, without which it is folly for any one to talk about the *philosophy* of agriculture. Philosophy is the generalization of well ascertained facts, and without the facts, there can of course be no philosophy. Between those who will observe nothing, and those who are too ready to see in every thing a confirmation of their own rude guesses, we are quite at sea upon the science of agriculture. At this very moment, learned and able men are engaged in drawing conclusions from what they have received as well ascertained facts. It is no wonder, that, differing as these facts do, their conclusions should vary too. In this too ready adoption of statements, where so little accuracy has been observed, agricultural writers have violated the first principles of philosophy, and have, as might be expected, subjected themselves to the sneers and derision of the plainest practical men. Thus it is, that certain great theories and systems, promulgated from high places, like other humbugs, have their day, until some plain farmer declares, and proves too, that the author has been mislead by his ignorance of the facts upon which he has attempted to reason; then is the whole theory exploded, only to make way for another equally as preposterous and short lived. Now, in agriculture, where an experiment can be tried but once in a year, and where it requires more than a lifetime to make as many as a chemist can effect in his laboratory in a morning, an insurmountable obstacle is opposed to its keeping pace with other sciences. This only proves the necessity of the greater care in authenticating and recording results, where so few are obtained, and it is for this reason, that we always so much prefer receiving and recording well authenticated facts, rather than fine spun theories, based upon surmises and guesses. We desire to fix a solid foundation, before we attempt to rear the superstructure.—Such and so loose, in our opinion, have heretofore been the observations of men engaged in the business of agriculture, that in our souls we do not believe that there lives the man, possessed of *facts* enough, to write a profound treatise on agriculture.

We must apologise for introducing so much of the Editor's correspondence into this number of the Planter, probably to the exclusion of much worthier matter; but much of it depended, for what little interest it might possess, upon the time and season at which it was published. At any rate, we were afraid it was not good enough to *keep*.

New York, October 1, 1842.

* * * I wrote you last from Boston. I left that hospitable city on Saturday, 25th of September, and arrived at Springfield about 9 o'clock at night. I was not a little discomfited to find that a remnant of the religious scruples of the old Puritans prevented my farther progress on the morrow, but the tedium of a Sunday sojourn in a country village, was much relieved by a morning's ride through the adjoining country. This is the land of manufactures, and falls of water, that would hardly be known as such in Virginia, are carefully husbanded and thrown upon as many wheels as they will put in motion. Their factories are, I believe, in a very depressed state, and as they are the main reliance of the people, who are by no means agricultural, much suffering has been experienced. Along the banks of the river the land seems to be fertile and well cultivated, but the interior appears to be a sandy waste, fit only to grow the stumpy pines with which it is covered. Springfield itself is a beautiful village, beautifully situated. There is an attention paid in this little inland place to flowers, shrubbery, neatness and decoration, that puts to shame many of our prouder cities of the South. I wish that I could present to some of our independent farmers' wives, (the farmers themselves are incorrigible,) a view of a Springfield dwelling, with its fresh paint, its neat paling, its beautiful shrubbery, its green grass and gravel walks, and prove to them, by ocular demonstration, how much of comfort, elegance, and refinement, could be had for the amount of a single grocer's bill.

As societies seem to take down our way, I have conceived the idea of getting up a great Anti-No-Paint Society. By the example of a few leading members, we might revolutionize the face of Virginia, and hand our names down to the latest posterity. Is there not something sublime in the conception? To be sure, we would not be the first *painters* that have immortalised themselves, but it would be *something* to be placed in the same category with Titian and Raphael.

On Monday, the 27th, I descended the Connecticut to Hartford in a little steamer, drawing eighteen inches water, travelling a distance of 36 miles for 12½ cents. To be sure, the boat was no great things, but then the river and the shores are very fine, making the travel cheap, exceedingly. I could obtain little else than a general outline of this part of the far famed valley of the Connecticut. The lands are said to be very rich and very highly cultivated, but from other portions that I visited, I saw no greater signs of fertility or cultivation, than may be found on many of our own streams. These fields are particularly rich in grass, and possibly, peculiarly adapted to its growth. There is no crop so grateful to the eye, or so beautifying to a country, as grass. Hence it is, that all grass lands obtain a reputation even beyond their merits. I saw here a little tobacco, and when I observed the care and attention they were bestowing upon the sickly foreigner, I felt as much obliged to the good people, as if they had been nursing a fellow-citizen. * * * * *

On the same day that I left Springfield, I arrived at New Haven, which is unquestionably the queen of New England villages. Here I was received and treated with the greatest hospitality by the Editor of the Farmers' Gazette, who volunteered as my cicerone in exhibiting to me the beauties of the city, of which its people may well be proud. Surely, these Yankees can do more with grass and trees than any people in the world. Here now is the most elegant place I ever saw, and yet there are no marble palaces, no magnificent public buildings; it is all effected by lofty elms, grass of the darkest green, and paint of the purest white.

On the 29th they held here an agricultural and horticultural fair. In the latter department, the exhibition was equal to any I ever witnessed. The agricultural show, with the exception of the oxen, was indifferent. The working cattle far exceeded in number and quality any I ever saw. I counted eighty yoke of oxen, I might almost say, the worst amongst them better than any in our part of the country. They were thoroughly broken and under the most perfect command. It was a very lively and pleasing sight to see them streaming into town in lots of fifteen or twenty yoke, hitched to a wagon decorated with flowers and filled with boys bearing banners, all moving at the word of a single driver. Notwithstanding the perfection to which the animal is brought, both in form and training, amongst the people of New England, I do not believe, from what I have been able to learn, that the average of the farmers' work can be done as cheap with them as with either our horses or mules.

* * * * I arrived at Albany, as you already know, too late for the great State Fair, but in time to partake of the agricultural dinner, at which "the feast of reason and the flow of soul," was worthy the occasion which called it forth. The next day was the one designed for the sale of stock brought to the fair. It may have been because it was a rainy morning, but the affair, like all of the kind that I have ever witnessed, seemed to go off dull and spiritless; indeed there appeared to me to be by far too many sellers for the buyers; in fact, I believe the day for extravagant prices for fancy stock is over, and those who have heretofore made a business of it, will have to go to something else. From fifty to a hundred dollars was as much as was bid for any of the cattle offered, and amongst them I was informed there was some of the purest blood and finest form. With the exception of a few fancy specimens in particular hands, I tell you, it is my opinion, that a hundred and fifty dollars in cash, will enable you *now* to pick amongst the cattle of the North; and it is to this that they must come at last. It is as much, probably more than, in these times, the farmer can afford to give, and it is far beyond the price of production. * * * *

I met here many old acquaintances that I never saw before, amongst them, Mr. C. N. Bement, of whose hospitality I partook at his farm of "Three Hills," about four miles from Albany. This farm was originally a sandy waste, like those around it, but, at much trouble and expense, Mr. Bement has made a garden of a wilderness. Here I saw the largest and finest crop of ruta baga I ever beheld, and, what I would have valued much more, a perfectly regular and splendid crop of carrots. The neatness and cleanness of cultivation here exhibited could not be excelled. I hope to obtain an account of the expense and yields of these two fields. This is peculiarly a stock farm, the cattle, the sheep, the chickens, the geese, the ducks, and, I believe, the very cats, are thoroughbred. Notwithstanding the high state of cultivation, the soil seemed to me to be of a very indifferent texture, and one requiring constant expense to keep it up. What would the energy, management, and industry, that Mr. Bement exhibits here, have effected upon some of our kindly generous soils in Eastern Virginia, that can be purchased for eight or ten dollars an acre. I could not help telling him that he was out of his element, and that I was sorry to see such a man in such a place.

There was one instance of management, I noticed here, worthy the consideration of every farmer in Virginia. Mr Bement's farm is called Three Hills; wherever there are hills, there are very apt to be vallies, and in one of Mr. Bement's vallies, or gullies, there ran a stream of water; where the farm road crossed this stream, we were told, there was formerly a wet, muddy place, in which the former proprietor's horses and vehicles frequently stuck. This crossing place, Mr. Bement converted into a dam, over which an excellent road is constructed for man or beast. The water collected above, affords a fall of five or six feet, under which is placed a small overshot wheel, which is applied to cutting straw, grinding cobs, and other light purposes. Here, by a little management and less expense, a nuisance is converted into a source of profit and convenience. * * * * * *

Philadelphia, October 20.

* * * * * Since I wrote you last I have attended the exhibitions, of the Philadelphia Agricultural Society, of the American Institute in New York, and of the Franklin Institute in Philadelphia. The last is purely mechanical, and although very rich and interesting to one who has had as much to do with mechanics as I have, it presented nothing worthy an agricultural notice. The exhibition at the American Institute in New York, is agricultural as well as mechanical, and has always been the most extensive and splendid in America. With the exception of the tools and implements, of which there was a great assortment, I had no opportunity of visiting the agricultural department. I was very desirous that some of our mechanics should have sent on specimens of their work to this exhibition, and offered to take charge of them. I think they would have competed successfully with northern products, beautiful as they are, and I would have been proud to show their manufacturers, that we are not the barbarians they take us to be. * * * *

* * * * The exhibition of the Philadelphia Society was purely agricultural. The show of tools and implements was very fine, the variety very great and the quality excellent; a few of the cows and one or two bulls were very extraordinary; the sheep and hogs common, and the horses very indifferent; but the treat consisted in an address delivered by the President of the Society, Mr. Nicholas Biddle, who, for fluency, unaffected ease, and simplicity of manner, is not excelled by any public speaker, to whom I have had the good fortune to listen. This address was in many respects a most capital one. It is true that individually I dissented from some of the doctrines of the speaker, and I thought that I could have discovered from the whole tone of the speech, that the orator was rather a *fancy* than a *practical* farmer; but the gentlemanly ease and unaffected conversational style with which it was delivered, and the occasional bursts of deep feeling, left you little opportunity of criticising the opinions of the speaker, while you were listening to him. The opening of the address I thought was peculiarly felicitous. Mr. Biddle began by expatiating upon the sensible objects around him, the different specimens of cattle afforded by the exhition, their history, peculiarities, and the advantages of each, the roots and vegetables, the mode of culture, and supposed nutriment afforded by each, &c &c.— This part of his discourse was replete with interest and instruction, and marked by proofs of the strongest common sense. It had all the force and interest of a lecture in a professor's room, where the apparatus, with which it is filled, is used to illustrate the truth of what is said.

I will be with you in a few days, and inform you of many minor particulars, that it is impossible to crowd into these general sketches. If you print any of this in the Planter, either correct it, or apologise for it, for it is all written, *currente calamo*.

Yours, C. T. B....

From the Cultivator.

TRANSPLANTING FROM THE FOREST.

Trees and shrubs transplanted from the woods to open situations seldom grow. The cause of failure is, that they are taken from shade and moisture and exposed to the hot sun, which stops the circulation; the body of the plant perishes, and the root in consequence dies also. It is well known that if briers are cut in the heat of summer, the roots generally decay and die. So with the trees and shrubs in question. To remedy this evil, it is suggested to cut off the tree or shrub close to the ground and plant the root only. The young shoots grow out with the spring, are naturalized to their situation, and soon attain a height and size as great as that which was cut off at planting. The fact that transplanted trees sometimes die at the top, and yet sprout from the root, proves the correctness of the above suggestion. The writer has been informed that the trial of this method has been made in another State with complete success, and recommends the experiment the ensuing spring. It is obvious that trees which do not sprout are unfit subjects for this process; such as pines, cedars, &c. P.

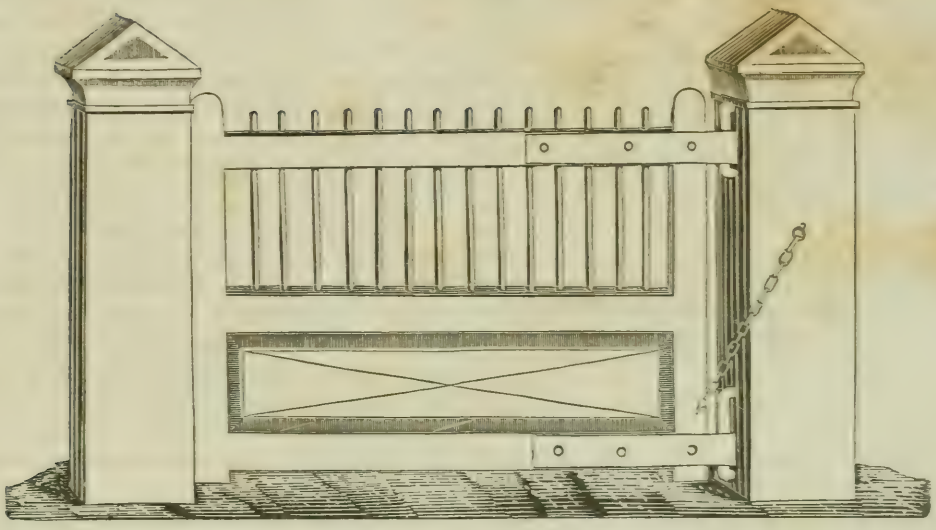
We make the following extracts from a letter received a few days since from General Peter Steinbergen, of the county of Mason:

"Our agricultural meeting will be held at Charleston, Kanawha, on the 3d day of Novem-

ber next. Crops in this section of the State are exceedingly fine. We have some fields of corn estimated to average one hundred bushels to the acre throughout the whole field. When a measurement is made, the amount will be accurately reported. Wheat, oats, every species of crop, fine. Such fall pastures for our cattle were never seen before among us. Green sward lodging in all directions on our farms, or at least those of the grazing estates, where attention has been paid to its cultivation.

"When we meet this fall, we will renew our old subject, on the improvement of land by the aid of grass, &c." * * * *

GATE.



We have had an engraving made of a model of a gate, constructed by Mr. E. J. Pearce, of Philadelphia, of which we obtained a casual view whilst we were in that city. We are supposed to be on the inside of the gate, and must push it to open it. The peculiarity consists in the hinges, and the chain extending from the post to the heel of the gate. When the gate is closed, this chain is tight, consequently, as the gate is opened, the strain upon the chain raises the gate, and the thimbles gradually ascend the rod on which they revolve Inasmuch as the gate rises from the ground by the opening movement, the possibility of dragging is obviated. Although the same effect can be produced by hanging the gate out of a perpendicular, yet we were so much pleased with the ingenuity of the plan, and the working of the model, that we bestowed upon Mr. Pearce, whom we have never seen, the only premium we can offer, a copy of the Planter, and if we find the thing in practice works as well as the model, he shall have the work as long as it is published.

From the Southern Agriculturist.

REMARKS ON THE IMPROPER USE OF THE PLOUGH IN THE CULTIVATION OF INDIAN CORN.

Mr. Editor: Dear Sir,—By request, I submit to you, for insertion in the *Agriculturist*, some remarks and experiments, I have made, to prove that the plough is frequently used too late, and much to the injury of our corn crops.

It is well known to rice planters, that when rice is in joint and forming its ear, every effort must be made to advance its growth, so that good ears may be formed. The same effort, to effect the same result, is necessary with corn, and all other grains. When the ear is about to be formed, the atmosphere has less influence on the plant than previously; therefore, more is required from the roots. If the soil is fertile, and

well broken up with the plough previous to planting corn, innumerable small fibrous roots will run laterally, in search of nutriment, to the distance of six or eight feet, and sometimes as far as twenty feet. These laterals are very small, and easily separated from the stalk; if cut by the plough when the plant is young, no injury will be sustained, and perhaps a benefit: but they must not be cut or disturbed in any way, when far advanced toward maturity.—Without their aid at that period, the perpendicular, or tap-root, will not be sufficient to produce good and well filled ears. It is not unfrequently the case, that the plough is used when the corn is in silk, and at that time these lateral roots are very numerous above the surface of the ground, and must necessarily be cut, much to the injury of the crop. I have made several experiments which prove conclusively, that the perpendicular or tap-roots, are not sufficient without the aid of the lateral roots, to produce good and well filled ears; and that, if the plough is used too late, a good crop cannot be expected. For my experiment, I selected eight well grown stalks, just before shooting out their tassels. I had the earth cut round two of these stalks about six or eight inches from them, to the depth and width of the spade, and the earth removed, so that I could see that all of the side roots were cut. The earth was permitted to remain in this situation until the corn was matured. The stalks looked well, and the ears appeared to be well filled; but, on examination, it was found, that there were but a few scattered grains in them.

In the next experiment, a cut was made round two stalks, with a spade to its depth and width, at the same distance as above. This cut was permitted to close immediately, no earth having been removed. The result was, small ears, not well filled.

The third experiment was to cut the roots on two sides of the stalks, as they are usually cut in late ploughing. On the other sides the roots were not disturbed. The result—small ears tolerably well filled.

In the remaining two stalks, no roots were cut or disturbed; the ears large and well filled.

The plough is not sufficiently used on our rice plantations, in preparing corn land for planting, and is generally used too late after planting. If the soil has been well prepared, and in good tilth, the cultivator, or hoe-harrow, may be used most advantageously after the second ploughing. As soon as the plants can be ploughed, the first furrow ought to be thrown from it, and the second to it; and if used again, the sooner the better, so that the corn may be laid by, when it has attained a third of its growth, or very soon after.

I will here remark, that the planter who wishes to increase his corn crop in quantity, must select his seed in the field. Seed from those stalks that have produced from three to six ears, will, in like manner, produce again from three to six ears, if the soil is well manured and well cultivated; and seed from those stalks that have produced one ear, will again, in all probability, produce but one ear.

Respectfully, your obedient servant,

JOHN H. TUCKER.

Hampstead, Sept. 9, 1842.

We laid aside this letter to show it to our friend Mr. Thomas S. Dicken, whom we consider the highest authority we know upon the subject of the corn crop. Mr. Dicken is probably upwards of fifty, and has been making corn all his life. For many years he was a manager on a large estate in Virginia, and in that capacity was remarkable for his industry, intelligence and success. After reading Mr. Tucker's letter, he shook his head, and very modestly observed, that he might be right, but that his doctrine was contrary to the conclusions he had drawn from his own observation. Mr. Dicken said, he would be unwilling to use the *plough* in late culture, whereby the roots would be turned up and exposed, but that he had found great benefit from the frequent use of a coulter, especially in a drought, after his corn had tasselled. We understood him to say, that he took care to keep the ground clean and well broken in the early cultivation, and then, the more it would not rain, the more he stirred it with a coulter, and this until the corn was done growing.

We conceive that it is only by giving our readers the testimony on both sides of a question that we enable them to form a correct opinion.

PREPARING FOOD FOR SWINE, &c.

Among the various modes of preparing food for fattening swine, I do not recollect seeing in "The Cultivator," the favorite plan of the writer of this note, viz: That of having all kinds of meal from grain intended for fatting hogs, instead of boiling or steaming, put into water in vats or tubs of sizes in proportion to the number fatting, and there remain until fermentation takes place, before feeding out to the swine—not giving any meal to hogs or pigs, until this acid fermentation is observable. In this state I have never known swine to become cloyed by overeating, however freely fed. On farms where cheese is made, I have found, as I apprehend, not only a safety but profit in putting the new whey into the vat where this process was going on. The concistency of this preparation, I think,

should not exceed that of good cream. In this way I have seen swine fatten faster than from meal given in any other form, and seen less marks of food having passed the animal undigested, which is often visible when food of a farinacious kind is freely given, unprepared; and I may add, according to my experience, (though on a very limited scale,) the most profitable.

The Yankees of New England have long since discovered, that the point of an old scythe, rendered unfit for mowing grass, by long usage, or broken by accident, sixteen or eighteen inches long, attached to a handle of wood, at right angles, or somewhat obtuse, serves all the purposes for cutting up corn, that the more formidable machine proposed by our Virginia farmer would—and almost without expense.

A Farmer of R. I.

A very ready method of disposing of the small cobble stones lying upon the surface of ploughed fields laid down to grass is the passing over them with a heavy roller in the spring while the ground is yet damp. By this process the stones will be sunk so low as not to be in the way of the scythe. These stones, we are confident, will be of essential benefit to the subsequent grass crops.—*Ed. F. M. Vis.*

MILKING COWS.

The owners of cows should pay particular attention to milking. Children must not be trusted with this business, and there are many grown people who never milk well well though they have been brought up to the business.

If you would obtain all the milk from the cow you must treat her with the utmost gentleness; she must not stand trembling under your blows nor under your threats. She may at times need a little chastisement, but at such times you need not expect all her milk.

Soon after the bag has been brushed by your hand and the ends of the teats have been moistened a little with milk, it flows in rapidly and all the veins or ducts near the teats are completely filled. Then it must be drawn out immediately or you will not get the whole. You must not sit and talk—you must not delay one moment if you would have all the cow is then ready to yield.

The udder should be moved in every direction at the close of milking, and the hands may beat it a little in imitation of the beating which the calf gives it when he is sucking. An expert milker will make the cow give one quarter more in butter, than a majority of grown milkers will.

Learners should know that the hand should be kept very near the extremity of the teat, if they would milk with ease. The left arm should always press gently against the leg of the cow; for if she is inclined to kick she cannot, with any force; she cannot *strike* an object that leans against her; but if she raises up her foot, as she often will when her teats are sore, the milker will be ready to ward off and keep it from the pail much better than when he sits far off from the cow.

If heifers are made tame and gentle by frequent handling when they are young they are not apt to kick the milker; their udders should be rubbed gently before calving; it is quite as grateful to them as carding. But if they are suffered to run wild till after they have calved they cannot be expected to be gentle when you first attempt to milk them. They often acquire bad habits and are not broken of them through life.—*Massachusetts Ploughman.*

A SIMPLE REMEDY.

A physician of extensive practice tells us that a prompt and effectual remedy for violent bleeding at the nose is to soak the feet in warm water. Lay this up "against time of need."

Concord Freeman.

Stumps are among the most troublesome obstacles in the settlement of a new country. A machine is sometimes used, with lever power, to eradicate them. It is literally a huge "tooth puller." It requires great power and much expense and time to accomplish the business, even with this machine. A better contrivance, because more simple and cheap, we saw practised the other day. A little excavation was made in under the stump, and some combustible materials enclosed, and then set on fire. Previous to this, however, some dry materials were piled around the root, above the surface of the ground, and then covered over with a compact layer of turf, forming a sort of coal-pit. It has been found upon experiment, that the stumps will burn in this way, a number of days, with a sort of subterranean fire, and when the turf falls in, nearly every thing of the root is found consumed below and above the surface of the ground.—Passing by a field near where the canal enters the Connecticut, awhile since, we noticed smoke issuing from twenty little mounds of earth, and upon inquiry, found they were burning out the stumps in the manner above described.

DISADVANTAGES OF FEEDING ENTIRELY ON DRY FOOD.

Horses and cattle fed on chopped oats or rye straw in its dry state, will obstinately refuse to take up all that is put in the troughs, and what they consume will be less nutritious than when slightly fermented. The process is the following, to feed on a cheap plan and keep stock in

better health and general condition, than with any other system. Have a box of sufficient size to contain all the food for your animals for one time feeding, cut oats, rye, or even wheat straw and mix with it one half gallon of Indian or rye meal for each beast; sprinkle in a little salt with water enough to moisten the whole mass, let it stand before feeding, at least twelve hours, or til it acquires a slight acid taste; then give it to the stock in the proportions you measured in, and your horses and cattle will be so fond of it, they will lick up every straw, keep fat and do well. By this mode I have found, from three years experience, that horses and cows will do better than upon all the corn and dry fodder you can give them.—*Agriculturist.*

A bit of ising glass dissolved in gin, or boiled in spirits of wine, is said to make strong cement for broken glass, china, and sea shells.

APOLOGY.

The unavoidable absence of one of the Editors until late in the month of October must form our excuse for the tardiness of the present number—the next will be issued certainly on the first of December.

SUBSCRIPTIONS DUE.

A few of our subscribers, who might have availed themselves of the sixty day rule, have failed to do so. If we once send the account out for collection, the full amount will be surely demanded. If they desire to save the half dollar, they had better be very quick after this notice meets their eye.

COMMUNICATIONS.

Communications, many of them of a very kind and flattering character, have accumulated on our table during our absence. They shall all be duly attended to.

We are indebted to the Hon. Wm. C. Rives for a copy of his address delivered before the Agricultural Society of Albemarle. It will be reviewed in our next.

We return our thanks to Dr. Fitch, of Salem, N. Y. for the account of the fair and cattle show of the Washington County Agricultural Society.

A FARM WADTED.

We have been requested to say that a gentleman desires to purchase a farm of three or four hundred acres of good land, in a healthy situation, with good improvements, for which he is prepared to pay from eight to ten thousand dollars. The latter sum he thinks, in these times, ought to procure a *capital* establishment.

Any communication (post paid) directed to the "Editors of the Planter" will be attended to.

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THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.*

Tillage and Pasturage are the two breasts of the State.—*Sully.*

C. T. BOTTS & L. M. BURFOOT, Editors.

Vol. II. RICHMOND, DECEMBER, 1842. No. 12.

PRINCE GEORGE COUNTY.

SANDY SOILS.

Some months since, we published replies of Dr. Harrison to the inquiries of the Virginia Board of Agriculture, and we are indebted to our friend of the American Farmer for the following comments upon them. There is a large portion of our country, to which they are equally applicable:

"Product of Corn in Prince George County, Va.—In the reply of Robert Harrison, Esq. to 'some of the queries of the Board of Agriculture, for the State of Virginia, so far as the county of Prince George is concerned,' we find the following paragraph:

"'Corn.—The average product per acre in that section of the county that has received an application of calcareous manures, we consider equal to *four barrels*, and the remaining portion of the county is considered not to exceed *two barrels* per acre. And we believe it more frequently falls below, than exceeds this estimate.'

"In the same paper, the estimated average product of *wheat* on marled land is stated at *ten bushels*, and that on land is *not marled* at *five bushels* per acre. Now it must be evident to every calculating mind, that neither of these yields can be said to be *remunerating*, and it must be equally evident that, notwithstanding, by the operation of marling, the product has been increased one hundred per cent. something remains to be done to bring the land of Prince George up to a proper state of fertility. What that something is, shall be the purpose of this paragraph, and we enter upon the inquiry under great feelings of delicacy, because we know that in that region of Virginia, there are numerous gentlemen of first rate intelligence and great practical skill in agriculture, infinitely more competent than ourself to suggest a remedy. So great indeed is our embarrassment, that if we were not encouraged by the saying of Sir Walter Scott, that he had never conversed with a man from whom he had not been able to learn something, we should not make the suggestions we are about to advance.

"It would appear from the paper of Mr. Harrison, that *clover* has only been introduced into the course of rotation pursued upon the marled lands, and that upon those which have not been marled, 'the process of rotation is corn, oats, sometimes rest, but most frequently pasturage'—a course of rotation unfortunately too well calculated to continue the infertility of the soil. It is possible, that *clover* could not be grown,—certainly not advantageously—upon lands averaging but *ten* bushels of corn, or *five* of wheat to the acre, but even as impoverished as such lands must necessarily be, the fact of the melioration produced by the application of marl, shows, that it is susceptible of being improved, and wherever lime in that form is not attainable, we think that plaster of Paris, if sown over the fields while in a state of '*rest*,' or pasturage,' would tend to increase its fertility, and that, if instead of devoting it to either of these purposes, successive crops of buckwheat were ploughed in, each crop receiving, previously to being ploughed in, a bushel of plaster to the acre, that in the course of a few years, those lands might be brought up to a state of profitable fertility, and that if in addition to the buckwheat and plaster, marl or lime were applied, that its ratio of improvement would be greatly accelerated. In the part of Virginia of which we are speaking, three crops of buckwheat might be grown and turned in in a single season, and when it is considered that this plant, from the construction and size of its leaves, extracts a very considerable portion of its food from the elements, there will but few be found, we think, to doubt that it would act as a fertilizer of the soil. It is a received maxim among agriculturists, that any lands which *will grow clover*, may, by the application of *lime*, be brought up to a state of fertility, equal, if not superior, to its virgin condition, provided a judicious rotation of crops be adopted and pursued—and that the lands of Prince George could be so brought up, we do not entertain the scintillation of a doubt—their susceptibility to improvement is most amply illustrated by the change for the better already wrought upon those portions of them where marl has been applied. The *increase* already effected of from *two* to *four* barrels of corn, and from *five* to *ten* bushels of wheat, shows, that the addition of the marl has supplied one of the ingredients of which the soil had been robbed by improvident culture, and would indicate that, in addition to the calcareous principle furnished, nothing is wanted now, but *nutritive manures*, to render the work of melioration complete.

"If the farmers in that region had ample supplies of barn-yard and stable manures, wherewith to give *short* periodical dressings to their fields, no one will doubt but that they could grow good crops; but however necessary animal and vegetable manures may be—and we freely admit that they are—still *lime*, in some of its forms, must be superadded to impart any thing like permanency to any improvements to be effected, as it is just as essential to the soil, as condiments are in the preparation of dishes for the human appetite."

In the American Agriculturist we find another system of renovating poor sandy soils, which consists in rolling and turning in clover. That turning in crops of clover, buckwheat, or Kentucky blue grass, will improve the land on which they grow, there can be no manner of doubt; and this process is like the rolling of a snow ball, the progress slow and difficult in the beginning, but gaining power in geometrical proportion with its increase. Any addition of lime, plaster or manure, that can be afforded, will of course hasten the result. Nor is there any end to this operation. The process may be continued until the land becomes gorged with its own products. But this is equally true of clay, as of sand, in fact of any soil. Some may be the better for an addition of lime; where there is too much sand, a little clay may be added, and vice versa. But this is no new discovery—Adam undoubtedly knew that he would improve his garden more by turning in his peas and beans, than by gathering and consuming them. The misfortune is, that although the cultivators of these poor lands know this as well as Adam or the Editor of the American Farmer, they generally find the crop barely sufficient to fill their own stomachs, as our friend may surmise from Dr. Harrison's statements. If the Editor's advice had been accompanied with instructions for living a year or two without eating, it would have been much more practical.

But if circumstances will justify the return of the crop to the land, what crop shall be used, the buckwheat of the American Farmer, the clover of the agriculturist, or the blue grass of our friend Gen. Steinbergen? We declare for the latter, where the soil and climate suits, next, we believe the clover returns more in proportion to what it draws from the soil, although we are inclined to think, that the buckwheat will grow when neither of the other two will start.

Mr. Allen says that in New England, where he made his observations upon the renovation of sandy soils by means of clover, great credit was given to the frequent use of the roller; this corresponds exactly with General Steinbergen's idea of the value of the trampling of cattle on such land. See PLANTER, Vol. 2d, p. 1.

TO MAKE GOOD SHINING BLACK INK.

Take two ounces of nut-galls in coarse powder; one ounce of logwood in thin chips; one ounce of sulphate of iron; three-fourths of an ounce of loaf sugar. Boil the galls and logwood together in three pints of water till the quantity is reduced to one-half. Then the liquor must be strained through a flannel into a proper vessel, and the remainder of the ingredients added to it. The mixture is then to be stirred till the whole is dissolved; after which it must be left at rest twenty-four hours. The ink may then be decantered from the gross sediment, and must be preserved in a glass bottle well corked.

For the Southern Planter.

GREEN SAND AND WORM FENCE.

Messrs. Editors,—I have just returned to the house from ascertaining the result of an experiment, made to determine the value of green sand applied to corn, which I suppose may not be unworthy a place in your paper. To you, Messrs. Editors, or the bulk of your readers, I need not describe this manure; so much having been written about it in the "Cultivator," under the name of "Jersey marl," and in the "Farmers' Register," under the names of green sand, gypseous earth, &c.—though I dare say you will be surprised to hear of it so high up the country.

From Professor Rogers' description of this earth, published in the same pamphlet with Mr. Ruffin's Essay on Calcareous Manures, and his suggestion that it probably might be found in Virginia at some considerable distance above tide water, I was lead to a discovery of it on my farm in 1835, an account of which was published in the Farmers' Register in October or November, 1836.

Mr. Ruffin's low estimate of its value, my own want of energy, &c. have for six years prevented even an experiment until the one hereinafter noticed, of the results of which your readers must judge for themselves; as for myself, I feel resolved to pay more attention to it for the future, in the confident assurance that I shall be amply repaid for any judicious application to the soil, a small quantity, in its worst possible state for application, having caused so considerable an increase of crop.

The experiment was this. Last spring, while the planting of corn was going forward, I carted

out several loads of green sand in a wet and sobbed state, and dropped a handful on each hill of corn for five successive rows, then drove down stakes to mark out these rows, then five rows were left without any green sand, and so on, alternately. The land was of course equal, and was cultivated alike. During the summer the marled part looked most flourishing, and upon being gathered to-day, weighed as follows:

1st. 5 rows with green sand applied, weighed	103 lbs.
1st. 5 rows without any, do.	85
Gain caused,	18
2d. 5 rows with the green sand, weighed	110
2d. 5 rows without any, do.	75
Gain caused by sand,	35
3d. 5 rows with sand, weighed	92
3d. 5 rows without any, do.	55
Gain,	37
4th. 5 rows with sand, weighed	50
4th. 5 rows without, do.	58
Loss,	8
5th. 5 rows with sand, weighed	28
5th. 5 rows without, do.	14
Gain,	14

Thus you see that there was a marked improvement caused by the green sand: I say *marked*, considering the small quantity applied, and the state in which it was when applied, being wet and clammy, and not resembling gunpowder, as it becomes upon being exposed to the air and frosts. The loss in the fourth instance, was evidently caused by the depredation of some animal on the five marled rows.

Upon averaging the five different experiments, as they may be called, I find, by calculation, that the gain caused was upwards of forty per cent.—an increase, had it only been general as it might have been, of no small consequence in these hard times.

I have thus, Messrs. Editors, given you an account of a small experiment, in the hope, that it may elicit the publication of others, made with the same substance; that the public generally, and we the owners of such deposites, in particular, may come to right conclusions in the premises.

SHARPE CARTER.

N. B.—My sheet not being filled, I would recommend to my brother farmers to place a stone under the corners of their fencing, which saves some labor and a vast deal of timber. This is done in the best and most expeditious manner by having stones of the proper size carted and thrown along where the fence is to run, two or three yards apart; the person laying the worm can put one under the end of each rail as he lays it down, and get along almost as fast as without this little hindrance. He who will try it once, I am persuaded, will never lay rails on the ground again.

S. C.

Barren Hill, Nottoway, Nov. 3, 1842.

SWAMP LANDS.

There are thousands of acres of uncultivated swamp lands in the South, which, if properly managed, we believe to be worth ten times the price of reclaiming them. We are well aware that to drain these lands and bring them into cultivation, is a heavy, and, as it is frequently conducted, a bootless work. We also know that there are a few of them irreclaimable, or if to be reclaimed at all, only at a price greater than the value of the land. Renovating poor high land is an expensive and tedious operation, and to bring it to the fertility of some of our wet swampy lands, will cost ten times as much as to reclaim the latter, especially if they can be freed from overflowing without the use of banks. But to reclaim a swamp, great judgment and skill are frequently required, for the want of which, thousands are sometimes expended without returning hundreds to the injudicious operator. Upon this subject, we give our readers the experience of that capital farmer, Mr. E. Phinney, of Massachusetts, as detailed in "Colman's Fourth Agricultural Report."

"I consider my peat grounds by far the most valuable part of my farm. They are more valuable than my wood lots for fuel, more than double the value of an equal number of acres of upland for the purposes of cultivation, and in addition to these, they furnish an inexhaustible supply of the most essential ingredient for the compost heap. Some years since, I occasionally sold to my neighbors, a few rods of my peat land, annually, to be cut out for fuel, at $3 per rod square, being at the rate of $480 per acre, but finding this sum to be less than its value for cultivation, especially when laid to grass, I have declined making further sales at that price. I have raised upon my reclaimed meadows, seventy-five bushels of corn, five hundred bushels of potatoes, and from four to five tons of the best hay at the first and second cutting, to the acre, at a less expense of labor and manure than would be required to produce half this crop upon my uplands.

"To render these lands productive, they should be thoroughly drained, by cutting a ditch around the margin of the meadow, so as to cut off the springs and receive the water that is continually

flowing in from the surrounding uplands. If the meadow be wide, a ditch through the centre may be necessary, but this will be of no use without the border ditches. This being thoroughly done and the surplus water all drawn off, the next step is to exterminate the wild grasses and herbage of every kind that grow upon the surface. To effect this, the method heretofore, and now by some pursued, is to cover with sand or gravel from three to six inches deep, top-dress with manure, sow the grass seed, and rake or bush it over. This, for the first year or two, will give a good crop of hay. But after this, I have invariably found that the more hardy and coarse kinds of wild grass would work their way through the sand or gravel, and completely supplant the cultivated grasses, when the whole must have another covering and another top-dressing, or be abandoned as worthless. If to be planted with corn or any of the root crops, my course has been to turn over the turf or sward, with a plough having a wrought-iron share and coulter, both ground to a sharp edge, in the driest season, say in the month of September, roll down as hard as possible, carry on the following winter a sufficient top-dressing of compost, about twenty cart loads to the acre, and in the spring spread the same, and plant with corn or roots, without disturbing the sod. When the corn or root crop is taken off, the surface is made smooth with the cultivator or hoe and harrow, and late in November, or just before the severe frosts set in, sow with herds and red-top seed, half a bushel of the former and a bushel of the latter, to the acre; the field is then rolled, which completes the process. If the plough does not turn the sward entirely over, it will be necessary to follow with the bog-hoe, to level the uneven places. By keeping the sod undisturbed during the cultivation, a more firm and compact surface is formed, upon which oxen or horses may walk, generally, without danger of miring. If the ground be intended for grass without the intervention of a hoed crop, the turf is turned over as before stated, in August or September, or as early in the season as the surface becomes dry enough to admit the oxen or horses upon it, then follow with the hoe and roller, and make such parts smooth as may be left uneven by the plough, and late in November cart and spread on not less than twenty cart loads of compost to the acre, made of equal parts of loam or vegetable mould and stable dung, then sow the grass seed and bush and roll down.

"If, after all requisite draining, the land still remains so wet and miry as to render the use of the plough impracticable, the bog-hoe must be resorted to, and the whole turned over by hand, the top-dressing carried on in the winter and the grass seed sowed in the spring, and if done before the frost is all out, it may be bushed and rolled down, otherwise it must be raked in by hand. The cost of turning over with the hoe will not exceed twenty dollars per acre at the usual prices of labor.

"This mode of culture completely subdues the natural grasses and wild herbage, and gives a compact, rich surface of vegetable mould, which will give an abundance of crop of the best hay for four or five years without the aid of more manure. If the sod be disturbed and attempted to be pulverized in the course of the cultivation, the surface when laid to grass will be loose and spongy, an extra top-dressing of compost will be required, and after all, the surface will never become so compact, nor the produce by any means so great.

"Should meadows be found too soft and miry to admit of being ploughed in the summer or autumn, and the expense of turning with the hoe be thought too great, I would recommend ploughing in the spring, when the frost is out to the depth of three or four inches, carting on the manure and then sowing or planting at a convenient and proper season.

"The most important part of the business in reclaiming these meadows, consist in taking off all the surplus water by judicious draining, and in thoroughly exterminating the natural herbage and grass. This being effected, we have our rich bottoms equally as productive as the deep alluvials of the West, and obtained at a cost and sacrifice very much less."

STONE FOR BUILDING.

In the Journal of Commerce, we find some very judicious remarks upon the use of stone in building, to the effect, that too many are indifferent to the properties of the stone they use, provided it be hard. Some stone is so porous and of such an absorbent nature, as to make the walls *givy* or damp, whilst other kinds, as those of a limestone character, are entirely free from this defect, so that buildings and cellar walls erected of such, afford apartments perfectly dry.

For the Southern Planter.

Some time ago, at the request of two of my most respected farming friends publicly expressed, I undertook to give some account of my mode of farming. Among other things the call embraced such a rotation of crops as I was in the habit of practising. This call, thus publicly made, and respectfully expressed, I did not feel at liberty to decline. Accordingly I commenced a series of articles which appeared successively in the Farmers' Register. At length, in prosecution of my plan, and in response to the call,

I took up the hackneyed subject of rotations, in which I attacked no one's theory, but simply gave the result of my own observations and practice. To this there speedily appeared a reply signed William M. Peyton, of Big Lick, Roanoke County. This reply was soon after, transferred, "*by particular request*," from the Register to the Southern Planter.

Now to all this, thus far, I have not the slightest objection. But I do object to the *ex parte* manner in which this thing has been done. That a *reply* should appear to a certain article, whilst that article is carefully suppressed, is to say the least, a little out of the common line of doing such business. If the Planter chose to become a party in the above controversy, fair dealing requires, as it seems to me, that the *whole* transaction should be presented just in the order in which it occurred—first the article replied to, and then the reply. But the order here employed,—to use a homely but expressive phrase,—"is to put the cart before the horse." But it seems that the reply was inserted by "*particular request*." Now who made this particular request, the motives why it was made, and the want of fairness in not extending the request to the *article* as well as to the reply—are matters that I have never taken the trouble to inquire into. But as this little matter of etiquette in fair dealing, seems to have been entirely forgotten in the present instance, it seems to me, that the Editors ought to have supplied it.

This reply furthermore, is ushered in by some editorial remarks, in which, as I think, an attempt has been made to *prejudge* the case. The Editors say, "We have not been unobservant spectators of the contest between these distinguished gentlemen, and we have failed to give our readers heretofore the benefit of Mr. Peyton's handsome and able defence of the established doctrine, simply, because it afforded so complete a refutation of Parson Turner's views. A novel idea had been advanced, and, in our opinion, clearly refuted." A little further on, those "views" of mine are figuratively pronounced to be "poison." Now these are broad assertions, and if they are intended merely to express the opinion of the Editors as *individuals*, I have no objections to them. But then the Editors will allow me to say, that they in common, with the other members of their fraternity, occupy a conspicuous station, and that therefore any opinions expressed by them are calculated to have a commanding influence. Here then it is asserted and that too by the highest authority, that my "views" are "poison" and that Mr. Peyton has ably and handsomely refuted them; and yet all these views are carefully concealed? In other words, we have the Editors' opinion prejudging the case, and warning their readers against these poisonous views.

But my object is not to have this obnoxious article published in the Planter. If any are anxious to see it, they may find it in one of the late numbers of the Farmers' Register. But I request, as a matter of mere justice, that my rejoinder to this reply, may appear in the Planter, and with this, so far as at present advised, I shall be content. I will simply add, that this request would have been presented at an earlier date, but for the fact that the Editors have been absent and I did not wish to agitate this thing before their return.

J. H. Turner.

In the first place, we return our thanks to Parson Turner for his forbearance to "*agitate* this thing" for such a length of time, knowing the inconvenience his self-denial must have occasioned him.

We are gravely accused of two crimes, to which it becomes us to respond; first of "carefully suppressing" an article of Parson Turner's, published in the Farmers' Register, and secondly, of "prejudging" a controversy then going on between the Parson and Mr. Peyton.

To the first charge we plead *guilty*, and if it be a crime to carefully suppress, by failing to reprint, all we see that we think little calculated to interest or instruct our readers, we have much to answer for.

As to the charge of "prejudging," if Mr. Turner means that we ought not to have expressed an opinion until he was done writing upon the subject, we have only to declare our conviction that such a rule would amount to a total suppression of our opinions—for knowing as we do the Parson's "bottom" and the "wind" of his adversary, we hardly hope to live to see the end of this controversy.

But Mr. Turner says, "if they are intended merely to express the opinion of the Editors, as individuals, I have no objection to them." We are glad to hear it; our remarks were assuredly intended only to express our *individual* opinions; although we might have been aware of the opinions of others, we certainly did not mean to express *them*. If our position, as Editors, renders us such *remarkable* individuals, as Mr. Turner would flatter us to believe, it would be hard, if our elevation should deprive us of the right, which, it seems, we might exercise in an humble capacity.

The truth is, we were requested to publish this correspondence, and under the influence of that request, we did what we did not mean to

do before, culled from it what we thought worthy of publication: in doing so, we expressed our opinion decidedly, but most respectfully, of the merits of the controversy, as it then stood. In this opinion, we may have erred, but it was an error of the head, and liable as we may be to such errors, we are and must be the sole and absolute judges of what shall fill our columns; Parson Turner has only the right, which we are happy to say he enjoys in common with thousands of others, to give his *advice* as a friend and patron of the paper.

As to the words "poison" and "antidote," to which Mr. Turner seems to take some exceptions, it is evident, they were only figurative expressions for error and refutation, and, as such, were perfectly respectful. It gratifies us, as it always does to oblige Mr. Turner, to present to our readers the selection he himself has made from his rejoinder to Mr. Peyton's reply:

"Having settled these preliminaries, I will at once proceed to the matter in controversy. And what is it? Mr. Peyton and the Editor seem both to have fallen into a mistake on this point. This makes it necessary that I should more particularly 'define my position.' Both of these gentlemen go upon the supposition that I am opposed to rotations of *every kind*, and under *every circumstance*. This I plainly and positively deny; nor is this inference fairly deducible from any part of my published piece. I hesitate not to avow that I am opposed to rotations for the common, and, as I think, *universal* purposes for which they are resorted to. And what are these? To *increase* a fertility which already exists, or at least to maintain it, or in other words, to make the subsequent crop *greater* than the preceding, or at least equal to it. Hence it is, that in nearly or quite all the treatises I have seen on this subject, of which there have been a great many in the Farmers' Register, the writer almost invariably concludes in language to this effect—that 'under this system, my land is constantly improving.' Indeed, I can conceive of no valuable purpose which can possibly be answered by a rotation, unless it be one or the other of those stated above. Now the position which I take at this time, and which I took in my published piece, is that all crops, grain, grass, and of every other kind, *when removed from the soil*, are exhausters, some to a greater and others to a less extent, but generally in proportion to the amount removed. This position I regard as almost self-evident. If there be any axiom in agriculture, I think this ought to be one. For what is it that has wasted away the fertility of our lands, until in many instances it is almost totally destroyed? Is it not that constant and injudicious *cropping* to which they have been subjected—taking off every thing that we could lay hands on, and supplying nothing in return? Here, then, is an evil inflicted upon the land, and it is *cropping* that has done it. Now can it be conceived that *subsequent* cropping will repair the injury of *previous* cropping? I will believe this when I can prevail on myself to think that the right way to repair a theft is to go and steal more. Or, as in this present controversy, Mr. Peyton gives me a drubbing, and, by way of soothing my pains, and thus repairing the injury, the Editor steps forward and gives me a more severe one. '*Noli me tangere*'—here is Latin, but I will translate it—'hands off, if you please.' This, then, is one respect in which I am utterly opposed to all rotations; and I must remain in the same mind until the ingenuity of these or other shrewd farmers can convince me that one injury can be repaired by another. '*Judæus Apella credat, non ego.*' This Latin is a little harder than the other; I therefore leave it to *Mr. Peyton* to translate. I am also utterly opposed to rotations on the score that there are in the soil certain ingredients which may be so taken up by any one crop as to leave the soil in a state unfit to reproduce that same crop. If there be any exception to this, it is perhaps a crop of flax. But Mr. Peyton tells us 'that a single swallow does not make a summer.' Here then is proof *positive*, that absolute reliance cannot be placed upon a single exception; or if this proof is not already strong enough, 'my Lord Coke' will help it out. But when I speak of a soil, I of course mean a *fertile* one; for a poor exhausted soil will produce no crop of any kind. This, if I understand him, is the main ground on which Mr. Peyton relies in his plea for rotations. In support of it, he states it as a notorious fact, that lands in his section of country, when so exhausted that they will not produce *grain* enough to pay for the cultivation, will nevertheless produce large crops of *clover*. Old tobacco lots also are restored in the same way. Liebig also helps him out with a case in which some one near Göttingen, (a great way off,) by raising a crop of wormwood, so exhausted the soil of its potash, that 'it refused to bear grass for many years.' Now, here is a hard case, Mr. Peyton, Liebig, the Göttingen farmer, and, what is much harder still, *facts* against me. And what shall I do with it? I will try to dispose of the *facts*, and if I succeed in this, I will leave Mr. Peyton, Liebig and the Göttingen man to dispose of themselves.

"The first fact is that lands near the Big Lick, in Roanoke county, (mark the position,) when they refuse to produce grain, having, as I suppose, parted from all the peculiar ingredients fitted for that crop, will nevertheless produce large crops of *clover*. Now, although my pre-

sent location is so near a city that I snuff the smoke of it every time the wind sets strong from that quarter, yet I happened to be born and reared to a large youth in a county adjoining the one which numbers Mr. Peyton among its citizens, and therefore I know 'a thing or two' about these very lands. It is true that I do not know the *particular farm* which Mr. Peyton occupies: nor have I the pleasure of knowing that gentleman himself, but I speak of the general character of the lands in that neighborhood; and I do know that they were originally exuberantly rich. They are a part of those 'valley lands,' which have a limestone foundation for their substratum; lands, as is proved in Kentucky and Pennsylvania, peculiarly adapted to the grasses, and to the growth of clover in particular. I have even seen clover growing luxuriantly in the woods on those lands. Indeed clover, although one of the artificial grasses, seems almost indigenous to that soil. It really seems almost as natural for clover to grow *there*, as for crab-grass to grow *here*. Now, in a soil naturally rich, and at the same time naturally disposed to produce clover, I am not surprised that it should grow, and grow vigorously, on a soil which refuses to produce an article to which it is not so congenial. The old worn-out tobacco lots are recruited, I presume, in the same way, and on the same principle. And as to Liebig's Göttingen farm, (I wish it was near enough for me to visit it,) it proves just nothing at all, or, if possible, *less* than nothing. It seems that a man, in his eagerness 'to obtain potash, planted his whole farm with wormwood.' Whether he got a crop or not, we are not told, and we are not told a great many other things which, in a matter of authority, I should like to know; but I presume he did get one, for he so ruined his land that it refused to bear grass for several years. Refused to bear *what?* We are told *grass*. But grass was not the last crop that it produced! When I came to this, I thought that Mr. Peyton must have made a mistake in his quotation, or that the *printer* must have made one. But no! All is right. Liebig says that, after producing the wormwood, the land refused to bear *grass*. Now why a rotationist should refer to this as authority, I cannot conceive.—*Wormwood*, surely, is not the same thing as *grass*. In *appearance* they are very different, and in *taste* still more so. Why, then, should the *wormwood* incapacitate the land to bear *grass*, a thing so different from itself? But it seems that the potash was so taken up by the wormwood, that none was left for the grass. Potash, then, cannot be one of the *peculiar* ingredients which is necessary to one crop and not to another. Here it was necessary to at least *two* crops, and for aught I know, equally necessary to twenty crops besides. And so it falls in with my theory, that the same ingredient, which I have taken the liberty of calling *fertility*, is just as necessary to one crop as to another. With this statement, I am at no loss to account for the failure in the man's grass crops. The wormwood exhausted the lands not only of their potash, but of their *fertility*, a thing which in my estimation is of much more importance. If the man, instead of puzzling his brains about the deficiency of potash, had only gone to Liebig and got some of his ammonia, and applied it pretty liberally, I doubt not his farm would have produced heavier and better crops of grass than they ever did before. Give me, therefore, this one peculiar ingredient, *fertility*, and I care not a fig for all the other peculiar ingredients put together.

"But I have a little more to say about this Göttingen farmer, so much relied upon as authority by your correspondent, Mr. Peyton.—According to Liebig's account of him—and this is all I know—I suspect that he was but a very poor farmer after all. He risked the productions of a whole year upon a *single* crop! Now I never knew even a *gambler*, rash and fool-hardy as gamblers commonly are, to risk his whole stake upon the cast of a single die. I wish the man had tried wormwood a second time, when he failed in grass. But I suppose that Liebig had drilled him too well in the doctrines of rotation, for this.

"There is another reason why I am opposed to this peculiar ingredient system; and that is, that, in my present circumstances, I should find it too expensive and too troublesome to practise upon. On this plan, as I am not a chemist, I should have to employ one; and as Liebig stands higher in authority than any other man, I think I should prefer him. I could get Macaire, Princep, or De Candolle, or some other Frenchman, perhaps, a little cheaper; but still, for certain reasons, I think I should prefer Liebig. Now, although, as I have had occasion to state elsewhere, the income of my farm is pretty considerable, still I fear that the increased income would not pay his salary. This, then, would be but a bad bargain. In fact, I doubt if the *whole* income of many farms would be sufficient to pay him. *What* then should I, and others situated as I am, do for our chemist? I am aware that this objection does not lie as it respects Mr. Peyton; for I see from his communication that *he* is a chemist, and therefore need not employ one. But I, and perhaps more than nineteen-twentieths of the other farmers of Virginia, would each have to employ one, or at least one for every neighborhood. And the reason is simply this, that before I could venture with any prudence to plant my corn or sow my wheat in any field, I must first ascertain if that field contained the peculiar ingredient, and in that peculiar quantity, which are necessary to insure a crop. See how much Liebig's Göttin-

gen farmer lost by not employing his chemist—his whole crops of grass 'for many years!'—Why this would ruin *me*, body and estate. But, jesting aside, it would really gratify me to see this visionary scheme carried into actual operation. And if Mr. Peyton will establish a farm on this principle—and, being a chemist, he is the fittest person that I know of to do so—I will leave my smoky atmosphere, and, with his permission, visit it. Such a thing appears very well on paper; I wish to see how it looks in practice. In fact, I have been a dyspeptic for nearly the last twelve months, and should be glad of an apology to visit the salubrious mountain region that he inhabits. How delightful, then, on such an excursion, to visit a field cultivated on this scientific plan—corn here, potatoes there, wheat, rye, oats, beans, pumpkins, turnips, not forgetting wormwood, every thing arranged in scientific order, according as the peculiar ingredients can be found, which are suited to each particular crop!

"Now *my* theory on this whole subject is so simple and plain, that I am rid of all this vexatious trouble and expense. There is no chemist, except the cook, on the place, and yet we get along pretty well. Grass, it is known, is my main crop, and as I plant no wormwood to exhaust the potash, I have had, with the exception of one unusually dry year, very fair crops. I go upon the simple principle, that every crop of every description which I take off, and appropriate to my own use, is injurious to the land. If I see any field, or any part of a field, beginning to fail—and this I see much more frequently than I wish—I never send for a chemist to tell me what is wanting. I already know that it wants *fertility*, and this want I endeavor to supply by *manure*. And in the applications of manure I never trouble myself to inquire what *special* ingredients it contains—whether humus, or geine, or ammonia, or silicate of potash, or phosphate of lime, or 'a thousand and one' other hard names infinitely more familiar with Liebig and Mr. Peyton than they are with me. It is enough for me to know that these manures impart to my land *fertility*—'the one thing needful' to every crop.

"But Mr. Peyton states another strong case upon the authority of Macaire, Princep, and 'alluded to by Liebig, in which *leguminosæ* (beans, reader) are represented as having so filled the water in which they grew with their excretions, that a second crop would not grow in the same, whilst corn plants grew vigorously in the liquid;' and he calls upon me by name to account for this strange phenomenon. This case, I frankly confess, is too hard for me. I have planted beans, it is true, and I have a very flourishing crop of them in my garden at this time, but I never plant them in a *liquid*. I always plant them in the *soil*, just as I plant corn or potatoes, or any thing else; and if the soil is a fertile one, and I cultivate it well, I never have any trouble about their growth. I beg leave, therefore, to refer this strange affair, and all others of a similar character, to Liebig, or Macaire, Princep, or some other of the chemical fraternity. Mr. Peyton tells me that the 'genius of De Candolle revived and illustrated' this very thing. Liebig afterwards 'modified it,' in some slight degree; but I suppose the gentleman is not satisfied with the modification, and therefore calls on me to modify it still further. Really, sir, I would like to gratify you, but this whole affair is too *refined* for me. I never plant beans in the way these gentlemen speak of, and therefore know nothing about it. But if you must have a further modification, I think it more than probable that the very next writer on chemical agriculture will *modify the whole away*, and then at least *one* of us will be gratified.

"And here, I will take occasion to say, is the foundation of all the objection that I have to scientific agriculture, or to farming on scientific principles. A chemist takes a vessel from his laboratory, in it he pours water, and in the water he puts some beans, just as I have seen my wife (she is a great florist) place her bulbous roots in flower vases, containing nothing but water and perhaps a little cotton to support the roots. In a little while the beans vegetate and show some disposition to grow. After a while the water becomes discolored. The first beans are now taken out, and others are put in the same liquid. These latter will not grow, but corn plants grow vigorously! And what can be the cause of it? *Some* cause *must* be assigned, and, for a better, here it is. The first beans so poisoned the water with their excrements, that the latter positively refused to grow. And this *one*, *solitary* experiment, tried, not in the field, but in the chemist's laboratory, and tried, too, in an element foreign to the growth of the article, is made the foundation of an extensive principle, which is to give a new aspect to the whole science of vegetable physiology! From the time of the first farmer, down to the time that this experiment was made in a chemist's shop, it was a matter of universal notoriety that, *provided* there was sufficient fertility in the soil, a *second* crop *would* succeed a first; but now it is found that the first crop so poisons the land by its excrements that the second will not grow.—And so all the previous facts, which were so well established, must be made to yield to this one solitary instance. It is to *fooleries* of this character that I am utterly opposed; but to sound science, brought to the test of practical utility, and found pure, I am as decidedly a friend as can be found in America or Europe either.

"But I am losing sight of my subject. Having now shown that I am no rotationist, either

on the *peculiar ingredient* system, or for the sake o' increasing, or even maintaining, a present fertility, which, by the bye, as I still think, fairly covers the whole ground, I will proceed to state, that I advocate a change of crops, whenever I can make a greater profit by so doing. The *profit*, then, is the leading idea, by which I am governed in this thing. In illustration of this, I will suppose that there is a piece of ground just recovered from the forest. I will not sow grass, or wheat, or any other broadcast crop there, because it is certain that with the soil unbroken, and the large quantities of litter on the ground, the seeds wound not vegetate, and therefore a crop could not be reared. But I will plant corn, or tobacco, or some other crop there, which I can cultivate on the plan of drill husbandry, and in this manner may ultimately so cleanse and pulverize the land as to make it more profitable in a broadcast crop. Or, there is a field which has borne several crops of grass: this field is now so filthy that it does not yield a profitable crop; at least the crop in something else would be *more* profitable, paying me at the same time for the labor of changing the crop. As a matter of good management, then, I would root up the grass, and substitute its place with that other crop. But this is not rotation. It is merely a change of the crop, not to effect any of the purposes of a rotation, but to make the land with its cropping as profitable as possible. If the field would yield a fairer profit in grass than in any other crop, I would continue it in grass for ever, and so of other crops.

"And now I hope I have fully 'defined my position' on the subject of rotations, and here, perhaps, I ought to drop Mr. Peyton. But there is another little matter to which I must call his attention. And, first, I am pleased that he had the courtesy to append his own proper name to his strictures. I have read these strictures with no unkind or even indignant feelings. The whole style of his piece shows that he is a scholar and a gentleman. I am not *certain*, but I suspect that my unknown antagonist is a *young* man. I like to see ardor and boldness in youth, but the gentleman will excuse me for saying that these qualities usually give place, in after age, to caution and modesty. With these remarks, I will call Mr. Peyton's attention to two sentences, in which I think he has done me injustice. I will not quote the objectionable sentences entire, but simply call his attention to them. He says, 'Mr. Turner sets out rather ominously, in the midst of a strange confusion of technical terms,' &c. Now I am utterly at a loss to conceive what can be Mr. Peyton's meaning in this and what follows. When I first read this, I thought I must have been betrayed into some incautious expression. I therefore carefully looked over the piece again; but still I cannot conceive on what this assertion is founded. If Mr. Peyton will have the goodness to point out that 'strange confusion of technical terms,' I will in disgust and mortification blot it from my manuscript. A little further on, he charges me with an attempt to 'varnish,' &c. Now all my positions are so plain, and all my illustrations are so simple, that I need no varnishes to cover their defects.

"The other objectionable sentence occurs near the beginning of the strictures. It is there said, that from my 'successful farming and well written communications,' &c. and then it is more than insinuated, that I am trying to pervert my influence to the injury of my brethren. To this grave charge, I again plead 'not guilty.' But even if guilty, I am consoled with the fact, that there is such an *able* opponent to make the antidote commensurate with the bane. With these remarks, and with the kindest feelings, I take leave of Mr. Peyton."

THE NEW WORLD.

We are again indebted to the liberal and talented Editor of this excellent newspaper for *extra* copies of his work. As the nature and style of our publication forbid our making him that return which he has a right to expect from his exchanges in general, viz: an advertisement of his prospectus, we will endeavor to relieve ourselves, in part, from the burden of his kindness by recommending the publication in general to the readers of light literature, and by especially bringing to the notice of the agricultural community his full and complete edition of Liebig's Organic Chemistry, furnished in an extra copy of the New World, for twenty-five cents.

Furthermore, if the publishers please to send to our office a few copies of the work, we will endeavor to dispose of them to our agricultural friends, without charging the one or the other a cent of commission.

THE FARMERS' REGISTER.

We are pleased to see that this valuable periodical, which in the hands of Mr. Ruffin has been not less an honor than a benefit to the State of Virginia, will be continued under the superintendence of Mr. Thomas S. Pleasants, a gentleman, as represented to us, worthy the honor of the post to which he succeeds.

Although, from unknown causes, we have not received from Mr. Ruffin those little professional courtesies to which we considered ourselves entitled, yet, as our professional relations have ceased, any little asperities that they may

have engendered, sleep with them. From the merits of the work we have never withheld the expression of our most unqualified admiration. We venture the assertion, that within the last ten years, the wealth, the standing, and the comfort of the agricultural class in Eastern Virginia, have been increased in a fourfold degree, and much of this great good is to be attributed to EDMUND RUFFIN and the FARMERS' REGISTER.

THE SOUTHERN PLANTER.

When we returned home we found on our exchange list the imposing name that heads this article. What, we exclaimed, "another RICHMOND in the field!" Oh no, says the clerk, with great earnestness, the paper is published at NATCHEZ. The queerness of this reply half diverted the vexation we began to feel from this infringement upon our rights, and we asked to see this new born brother, who had not yet been introduced to our acquaintance. Accordingly, we were shown a very imposing pamphlet of 16 quarto pages, marked S. P. Natchez, Miss., $3 per annum. In its showy cover, its gaudy trappings, its extensive pages, and its assuming price, we perceived no family likeness to our own cheap, unassuming, modest, meritorious, dear little work, and we set the fellow down as an impostor.

How does this Editor justify this vile robbery? Because that love sick, foolish, girl of Shakspeare's, declares, there is nothing in a name, does he think he may steal one at pleasure? Rather, should he have remembered what that sharp, cute, fellow, Iago, says upon the subject. He declares that a robber on the highway, we quote from memory, is more of a gentleman than such a fellow as this, and that he who steals a *good name* is worse than the taker of a purse. Now our name is as good as Iago's, and we will warrant our purse as poor, consequently, what he says of himself and the name stealer, is equally applicable to us and this Mississippian.

The circumstances would justify us, we are aware, in inditing a very severe article against the perpetrator of this robbery; but, like good Christians, we have written him a private letter, pointing out the enormity of his crime, and persuading him to surrender what he has so foully taken. If this letter exercises its due influence, we have determined not to mention the subject in public, and in that event, we beg all those who may happen to see this, to say nothing about it.

NOTE.—Is it possible that this man can have lived in such obscurity as not to have known of our existence?

From the Boston Cultivator.

ECONOMY OF FUEL.

COMPARATIVE VALUE OF GREEN AND DRY WOOD.

A very important consideration to be attended to in the saving of fuel, is the manner, or *modus operandi* of cutting it. A farmer who is the owner of a good wood lot, should make it a standing rule to cut smooth as far as he goes. This running helter skelter through a valuable growth, felling one tree here, and another there, is bad management, and should ever be avoided by those who desire to preserve their wood in a healthy and growing state. Where the growth is thick, it must be obvious that large trees cannot be cut without effecting a very material and decided injury to the surrounding growth. Some will be broken, others torn up by the roots, and of those that escape immediate ruin, many will be so lacerated as greatly to retard their growth. The French, from whom we may borrow many important lessons in the great science of DOMESTIC ECONOMY, generally cut *all smooth;* and this plan, which we have seen practiced in this country, in several instances, appears to us to be the only one worthy of being pursued. We have now growing a piece of oak wood on a hill that twenty years ago this autumn, was cut over and burnt. The growth is now quite large and thrifty, most of the trees being from four to six inches in diameter, and very thick; much more so indeed than a proper regard to their rapid increase would probably permit.

One more remark and I shall have done. It is generally contended that so far as mere economy, or the saving of fuel is involved, *green wood* is far more profitable than *dry*. This is another fatal mistake. To say nothing of the superior comfort of having dry wood, in winter, there are many advantages to be gained from it on the score of expense.

There are some kinds of green wood which contain not less than forty-two per cent. of water—a sufficient quantity, as every one will perceive, to absorb a very large proportion of the heat or caloric produced by the combustion of the wood, for in the deflagration of one hundred pounds of wood, it is necessary, in the first place to convert the forty-two pounds of water or aqueous vapor, into steam, and this act alone must, as a natural consequence, require a very considerable proportion of all the heat produced by the conflagration of the wood.

It has been ascertained by actual experiments, that of Newcastle coal, one pound avoirdupois, is required to convert six pounds of water into steam, and that two pounds of common wood

will generally impart about the same quantity of heat as one of coal. It will hence be seen, that to convert forty-two pounds of water into steam the heat produced by seventeen pounds of wood will be required. Now, by deducting the forty-two pounds of water from one hundred pounds of wood, we have left but fifty-eight pounds of dry wood. Hence, no less than sixty per cent. of the gross weight of green wood is entirely thrown away. The steam in the act of evolution, emits no heat, as it ascends directly with the smoke and thus causes actual loss of more than one-half the wood consumed. This is a startling calculation, but one upon the accuracy and correctness of which we may safely rely with the fullest confidence, and no one, it is presumed, who will take the trouble candidly to reflect, will find cause to deny its truth. Every farmer, therefore, should endeavor to burn dry wood. To cut and split, in the spring season, a sufficiency of fuel to supply his winter wants, is but a small job compared with that of getting it up during the inclemency of winter.

GUINEA GRASS.

Along with some grass roots, for which we are indebted to the public spirit and politeness of Mr. Garnett, we received the following note:

Messrs. Botts & Burfoot:

Gentlemen,—I now send you the Guinea grass roots which your North Carolina friend requested you to procure for him; and with your permission, I will avail myself of this occasion to publish once more, what I think of this grass, as I find that some of my good friends have attributed to me opinions which I never entertained. Not that I consider these opinions at all important to any of my brother farmers. But having once published them, and perceiving that some persons have thereby been induced to make a trial of the Guinea grass, I owe it both to them, and to myself to guard them, if I can, from forming any erroneous opinion on the subject.

The good friends to whom I allude, have called it "my favorite grass," preferring this, I presume, to the somewhat ruder term—"*hobby*," although it means pretty much the same thing. But the truth is, that if I must have a hobby—like most of my brethren—it shall neither be of *grass*, nor *straw;* and as to the grasses, I have been content to rank them as those have done who have most experience in their culture.—What I formerly said of the Guinea grass I still think; and it is, that it will produce a greater weight of green food—counting the four cuttings which it will certainly bear, at an average height of between two and three feet, in high, dry land, of ordinary quality, than any grass of which I have any knowledge. I infer from this, that it would yield a greater quantity of such food, on high, dry land, of *any* quality. I have also said, that it will stand drought better than our other grasses, that horses and cattle eat it very freely, for I have seen them do it. How it would compare with other grasses in nutritive properties I do not know, as none of them, I believe, have yet been analyzed in this country. It is certainly a coarse grass, if suffered to reach a greater height before cutting, than I have mentioned, and therefore less suitable for hay than the grasses commonly used for that purpose. It is also hard to extirpate, but not more so than the red top, which is generally preferred to all others, for very wet land. From all these facts, then, which I have noticed for four years, I deem myself authorised to say of the Guinea grass, that in all high, dry, and even sandy soils of ordinary quality, such as are unfit for either clover, orchard grass, timothy, red top, or meadow oat, it will produce a much greater weight of green food than any of them; that it will stand drought much better, and that horses and cattle eat it freely. But in all situations where the climate and soil are well adapted to clover, orchard grass and timothy, it might content any farmer to cultivate no other kinds. Still, the knowledge of their excellence should not prevent small experiments with other grasses; for our maxim should be, that there is no stopping place for those who wish to acquire a thorough knowledge of husbandry, in all its branches. Let your friend then, proceed to make a small experiment with the Guinea grass roots, which I now send you for him. They should be buried in the earth until the ground ceases to freeze in the spring. Then cut the roots into pieces two or three inches long, and plant them in well prepared land, between two and three inches deep. Let the rows be twelve inches apart, and place the cuttings in each row, at the distance of eight or nine inches. The plants will require working the first year; but after that they will occupy the ground to the exclusion of any other growth, and will bear cutting at least four times a year. In one season I cut it five times. With sincere wishes for the success of your paper,

I remain, gentlemen,
Your obedient servant,
James M. Garnett.

CEMENT FOR PORCELAIN, GLASS AND STONE.

This cement is a natural product, which without being abundant, is in sufficient quantities for ordinary purposes. The large snails which are found in gardens and woods, and which sometimes have been used for food, have a vesicle, at the extremities of their bodies, which contains a whitish substance, having a greasy and gelatinous appearance. If it is applied between two

surfaces, whatever be their hardness and compactness, and the surfaces be brought together throughout, so strong an adhesion is ultimately formed, that if violent means be resorted to, they frequently break elsewhere, than at the juncture. All that is necessary, in order to give the cement its full power, is to allow it time to dry.

MR. RIVES' SPEECH.

From the excellent address delivered by the Hon. William C. Rives, before the Agricultural Society of Albemarle, we extract the following remarks on the use of

LIME.

"Being somewhat of a pioneer in the lime husbandry in this portion of the State, I feel myself called on, gentlemen, to give you the results of my experience. I have used about 12,000 bushels of it, (slacked measure,) from a quarry opened for the purpose on my own land, which has been spread over about 150 acres, at an average, therefore, of 80 bushels to the acre. Some accounts which I had read of its effects elsewhere, not expressed with the accuracy and discrimination so much to be desired in such communications, had led me to expect a decided effect from it upon the *growing* crop—by which I mean the crop, of either corn or wheat, immediately succeeding the application of the lime. In this, I was disappointed; but the discrepancy is probably accounted for by the fact that I have not hitherto used lime in combination with putrescent manures from the farm-yard or the stable, while others have most probably done so, though that circumstance was not noted in the communications to which I refer. My first disappointment, however, in regard to the effects on the growing crop, was more than compensated by the marked, unequivocal, and decided effect I have never failed to perceive from the lime *alone* in the *clover* succeeding the wheat crop—with which it has been my general practice to apply the lime at the time of seeding, harrowing in the lime and wheat at one and the same operation. The increased luxuriance of the clover has furnished, of course, conclusive evidence of the improvement of the land from the application of the lime, and has in its turn, enured to the still further amelioration of the soil. All my observations in regard to lime would lead me to the opinion that it is the most *permanent* of all manures, and to concur in the conclusion so forcibly stated by Dr. James Anderson, one of the most copious and able of all the British writers on agriculture, who in his most valuable 'Essay on Lime' says, '*that its effects on the soil will be felt, perhaps as long as the soil exists;*' and this conclusion he justifies by the mode of its action altering the nature and constitution of the soil itself, and enduing it with capacities and affinities which it never before possessed. My applications of lime have been almost entirely on a close gravelly loam, of a brownish or gray color; and the result of a single experiment on land of a different description would lead me to believe that it is not adapted to the red ferruginous clay soils of the sides and base of our south-west mountains. It is a proverb in England and Scotland that

> "'He that marls sand
> Will soon buy land;
> But he that marls clay
> Throws all away.'

"The reason that Dr. Anderson suggests for the comparative inefficiency of marl on clay soils is, that clay forms a large proportion of marl, and the addition of clay to clay, therefore, cannot be expected to produce so good an effect. The same reasoning would furnish a solution of the supposed want of adaptation of lime to the red clay soils of the south-west mountains *proper*, and of its unquestionable efficacy on the adjacent gray loams, as a chemical analysis of the two soils has, I understand, disclosed the existence already of two per cent. of lime in the former, and of hardly any sensible quantity whatever in the latter."

Mr. Rives, with great propriety, states that his impressions as to the effect of lime upon clay soils are grounded upon a *single* experiment, and we will add, that we hope the result will not deter him from making others. It is by no means uncommon to find clay soils deficient in lime, where, of course, the application must be beneficial. It is very possible however, that the clayey portion of Mr. Rives' estate may abound in this necessary ingredient, whilst the gravelly parts may be deficient in it. Nor should either the Scotch proverb, or Dr. Anderson's suggestion, close the door to the application of lime to clay soils. In both instances, the term *marl* is used instead of *lime*, and in both cases, English marl is referred to. Now, although the term, as used in England, is a little indefinite, and is frequently, we believe, applied to pure clays, it is never used except to express a strong admixture of clay. But in the first place, an inhibition of clay to clay, does not include an application of *lime* to clay, and in the second place, the organic remains, that *we* term marl, are frequently found in connection with an unctious sand, that has proved extremely beneficial to a close clay soil.

We do not conceive, that the fact of the pre-

sence of two per cent. of lime in a soil, should preclude a further application.

A little farther on, Mr. Rives makes the following judicious remarks upon the subject of

IMPROVEMENT.

"For myself, I will only say that I have always found the best application I could make of money derived from the land, was to return it back to the land in the shape of improvement. There is no investment of capital which can be more safe, and in ninety-nine out of a hundred cases, none half so profitable. If by laying out five dollars in manure on an acre of land you make it produce you twenty bushels of wheat worth a dollar a bushel, when it produced but five bushels before, and this product is renewed to you every four years in an ordinary rotation of crops, have you not secured an interest of one hundred per cent. on the outlay you have made, and at the same time, increased the value of your land four hundred per cent.! And yet results such as these, extravagant as they may seem, and though we may be unconscious of them ourselves, are often achieved by a liberal and spirited system of improvement. The *passion* of us Virginia farmers is to acquire more land—not to make the land we already possess more productive. If a farmer should add yearly to his possessions a hundred acres of land, he would doubtless consider himself getting along very prosperously in the world. But if at no greater expense he can make a hundred acres of land twice or thrice as productive as they were before, is he not doing much better, with the great advantage of having a more compact surface on which to concentrate his labor and care.

"The misfortune of our Virginia agriculture is that we have already too much land for the labor we can bring to cultivate it. As we are not likely to make a voluntary curtailment of the extent of our farms, the greatest practical reform that can be introduced into their management is to curtail the arable surface on each, and to lay down a larger portion of our lands to grass. Instead of wasting the energies of our soil by annually spreading over a wide surface a superficial, negligent, and teazing cultivation, yielding comparatively nothing, how much better would it be to cultivate one-half or one-third of the space we now do, to concentrate upon that all our resources of labor and improvement, and to leave the rest to recruit itself by the healing processes of nature. Liebig has explained in a very ingenious and philosophical manner the process by which lands laid down to grass are constantly renewing and improving themselves, and has thus confirmed the deductions of our own observation by the demonstrations of science. Should any one doubt whether we should derive from the reduced surface, better cultivated, a product equal to that of the whole under inadequate culture, let him recollect the instructive story told by old Columella, in his *De re rustica*, of a Roman vine-dresser, who had a vineyard and two daughters; when his eldest daughter was married, he gave her a third of the vineyard for a portion, and yet he had the same quantity of fruit as before; when his second daughter was married, he gave her the half of what remained, and still the produce of his vineyard was undiminished.

"This anecdote of the Roman agriculturist, gentlemen, points the full force of its moral against that fatal mania for emigration which has hitherto carried off so large and valuable a portion of our population to seek wider domains for themselves and their families in the prairies of the West. It is not more land that we need. We have enough, and more than enough already, if properly cultivated and improved, for ourselves and our children after us. It is industry, improvement, good husbandry we want, to develop the natural capabilities of our soil, and to make it adequate to every reasonable wish, and even to the fondest dreams of prosperity and wealth. With these, seconding the gifts of Providence by which we are surrounded, we shall have nothing to envy in the untamed abundance of the West, tempting us from the cherished scenes of our childhood and the hallowed tombs of our ancestors. I am happy to believe, gentlemen, that a brighter day is now dawning upon us, and that the eminent natural advantages and superior capabilities of Virginia are beginning to be appreciated, at their true worth, by the citizens of our sister States, as well as to be more and more felt by her own children. While emigration from our borders has, in a great measure, ceased, other States are beginning, in their turn, to send to us tributes of their moral, industrious, and enterprising population, attracted hither by the advantages of our climate, our numerous navigable rivers, our water power, our mineral resources, our favorable geographical position, our kind and improveable soils. Of these welcome swarms from kindred hives, I have recently become acquainted with one of so interesting a character, embracing persons of great respectability, from one of the oldest and most highly improved counties in the State of New York, (the county of Dutchess) that I cannot deny myself the gratification of reading to you a letter I have recently received from an intelligent citizen of the county of Fairfax, in answer to some inquiries I addressed to him, giving me the particulars of their settlement and establishment in that county.

"[Here Mr. Rives read the letter referred to, as follows:]

"'*I proceed to make the following answers to your inquiries.*

" '*How many citizens of New York have purchased land in your county?*

" 'Answer. *From the best information I can obtain there are about fifty-six families that have purchased land, some of which have not removed, but the greater part of them now reside in the county; these families average from three to five persons, making about two hundred persons in all.*

" '*How much land in all have they purchased?*

" 'Answer. *Thirteen thousand five hundred and thirty-two acres. They have very generally preferred small sized farms, from one hundred and fifty to two hundred acres, but they have been compelled to purchase large farms, or rather large tracts of land, which they are cutting up as fast as they can.*

" '*Have they been sufficiently long established to indicate what their system of farming may be?*

" 'Answer. *I do not think they have. But their system so far as I have observed it, is in favor of the cultivation of grass over that of grain, and thus far they have made rapid improvements in the appearance of their farms, if nothing else. They remark that if clover will grow well, they are satisfied they can make the land rich.*

" '*Have they used lime, and with what effect?*

" 'Answer. *I do not think they have used lime to any extent, so as to know what its effects will be.*

" '*What appears to be the prospect of a farther accession of settlers from that quarter?*

" 'Answer. *The prospect seems to be very good. I have no doubt from the information I have obtained, that they will continue to come amongst us. They seem to be delighted with the climate and generally pleased with our people, and I know of no one who has settled here who is desirous to return to the North. There is now a strong disposition amongst the wealthy farmers of Dutchess county (the richest county in the State) to purchase lands and remove to this county. Much might be done by our legislators to promote this emigration so important to our impoverished and wilderness state, but I forbear to enter upon this topic at the present.*' "

It is the proverbially light sandy soils of the county of Fairfax, probably one of the poorest in the State, that these sharp, cute, Yankees prefer to any thing they can obtain in their own country for the same money. They are right. We sincerely believe that the light, worn-out soil of Eastern Virginia, from the facility with which, under good management, it may be renovated offers the best opportunity of investment to the agriculturist, that can now be found in the Union. There is but one thing that the active, industrious farmer of the Northern States has got to learn, to enable him to lead a life of ease and comfort in Virginia, which he has heretofore known only in his dreams. We allude to the management of slaves, a great art, the importance of which is not sufficiently considered by the natives of the South, and is totally unknown to the inhabitants of the North.

SPEEDY CURE FOR A FOUNDERED HORSE.

I send you the following prescription, which you may give a place in your useful paper, if you think it will be of any advantage to planters and travellers.

As soon as you find your horse is foundered, bleed him in the neck in proportion to the greatness of the founder. In extreme cases, you may bleed him as long as he can stand up. Then draw his head up, as common in drenching, and with a spoon put far back on his tongue strong salt, until you get him to swallow one pint. Be careful not to let him drink too much. Then anoint around the edges of his hoofs with spirits of turpentine, and your horse will be well in one hour.

A founder pervades every part of the system of a horse. The phlegms arrest it from the blood; the salt arrests it from the stomach and bowels; and the spirits arrest it from the feet and limbs.

I once rode a hired horse 99 miles in two days, returning him at night the second day; and his owner would not have known that he had been foundered if I had not told him, and his founder was one of the deepest kinds.

I once, in a travel of 700 miles, foundered my horse three times, and I do not think that my journey was retarded more than one day by the misfortune, having in all the cases observed and practiced the above prescription. I have known a foundered horse turned in at night on green feed; in the morning he would be well, having been purged by the green feed. All founders must be attended to immediately.

South-western Farmer.

OVERSEERS.

From an address delivered by our former fellow-citizen, John T. Leigh, Esq. before the Union Agricultural Society of North Mississippi, we make the following extract:

"It is the duty of every farmer to give personal attention to his own business. He ought at all times to know the situation of his farm, his servants, his crop, his stock, his tools. This cannot be done without attention.

"Frederic the Great was his own prime minister, his own treasurer, his own commander-in-chief, his own intendant of public works, his own minister of trade, justice, home and foreign affairs, his own master of horse, steward and chamberlain—not that he actually performed all the manual duties of the different offices; but

he examined and saw that they were performed; *all, every one of them.*

"He who was faithful and trust-worthy was retained and rewarded; whilst he who was not attentive, prompt and honest in the fulfilment of his duties, was discharged; and, as he had the power, the offender punished.

"What was the consequence?

"All the affairs of his great empire flourished. Surely, if one man could give his personal attention to the affairs of a whole nation, we planters and farmers may give personal attention to the affairs of our plantations. If we have managers, and they are good, they will be pleased and stimulated to see their employer daily examining into their plans, their work, their labor; advising with, consulting and directing them in their course. If they are not good, their want of skill or industry will soon be discovered, and, before too late, may be remedied. The good, faithful, honest manager will be rewarded, his character as such raised, the demand for his services will increase his wages. Thus all—all who intend to do right, employer as well as manager—are interested in the planter's looking well and constantly into his own affairs.

"There is a great mistake prevailing among many employed as managers on farms. They think the vigilant eye of the employer is indicative of too much suspicion of their want of management or attention. But it is not so. The employer will always be pleased to find his affairs well managed, and the really good manager will, or ought to be pleased to see his employer examining particularly and minutely into his management. If well done he gets his reward. None then but those who are careless, or lazy, or not trust-worthy will or ought to object to a rigid review of their management. But object or not, it is the duty of the employer to do it—and no planter can thrive who shrinks from his known duty.

"In the State of Virginia from whence I lately removed, there was a considerable spirit of improvement prevailing in every class of society among the farmers and their managers (overseers as they are called) many of whom were paying great attention to reading agricultural works and gaining information in any way in their power. Some of the overseers read and improved and *profited by it* much more than their employers. Many are ages ahead of the old fashioned planter."

A farmer may read all the books that have ever been written, and become as profoundly versed in the science of agriculture as Liebig himself, but if he does not give his constant, vigilant, personal, superintendence to every department of his business, he will never meet with the success, that crowned the labors of the Prussian monarch.

FOOD FOR CHICKENS.

A correspondent informs us that raw dough, made of fine meal is injurious to chickens, yet this is the principal food given to young chickens, and we have no doubt that it has occasioned the death of many thousands. We were aware of the injurious effects of this food before we received the information and had discontinued its use. We copy from our intelligent correspondent as follows:

"It makes little difference what chickens eat after they are nearly as large as quails, four or five weeks old say, but to stuff a young brood as soon as they are out of the shell, and the first two or three weeks with dough made of fine meal, you will do better than I can if you save one half. I know it is the common food for young chickens, and I suppose because it is easiest got, but the consequence is, eight times out of ten you will find a dead chicken about every morning in or about the coop. They commence dying off from one to two weeks old. Now the true way is simply this—if your hen can run at large don't feed them at all, unless you should have a great number about your premises; if to be cooped up, locate them on a dry, sandy spot exposed to the sun in the morning, and out of the way of cold winds by all means. Let them fill up with dirt, (which they will do as soon as they are put to the ground.)

"After that (though don't be afraid they will starve, nor be in too great a hurry in taking them from their nest) the first feedings, say two or three, should be cooked fresh meat, eggs boiled hard and cut fine, shells and all, or curd, if you have it, then dough made of samp, that is yellow corn ground coarse and suffered to stand awhile to swell, and boiled potatoes either mixed with the dough or plain occasionally, is proper food, if given sparingly. Chickens are always over-fed when very young. The old hen must have hearty food of course, give her corn. Since I have adopted this way of starting them at first I rarely lose a chicken by sickness, and if the cats and rats will let them alone I can raise about all that come out."

Cracked corn that may generally be had in cities and other large places of business, is about the same as the samp above recommended.—Chickens like other animals want variety in food. They are very fond of rice raw or boiled as may be convenient in supplying them. This will not be expensive, as one cent's worth to each chicken will answer till he is five or six weeks old, when it is not of so much importance about their food. They will eat whole grains of rice when two or three days old.

If it be not convenient to get other food than

Indian meal, mix one-fourth part Indian bran with the meal, and then pour on hot water and make a dough; we have succeeded well with this as a principal food. A little brown bread occasionally for a change is good.

Farmers' Journal.

THE BEARING-REIN.

The following article, from the London Farmers' Magazine, upon the abuse of the bearing-rein, which has been frequently published of late, attracted our attention some months ago. We were much struck then with the excellent style of the article and the clearness and perspicuity with which the author enforced his views; but so novel were these views, and so much did they militate against preconceived prejudices, that we determined to scan them narrowly before passing an opinion upon them. We have now applied and tested them thoroughly, and the result is, that we have come to consider the bearing-rein the most useless, cruel, and tasteless fetter to which the horse has ever been subjected. We can perceive no possible use in this rein, except to restrain a horse from kicking up, by preventing him from throwing down his head; for any other purpose, it would be just as reasonable to apply it to the riding as the draft horse.

Like all new converts, we have become very zealous in the cause, and, running from one extreme to the other, instead of admiring a "high head," we hope the day will come, when the man, who ties up his horse's head, will be classed in the same category with him who beats his wife.

With all our predilections for condensing, we have not been able to abate one jot or tittle of this capital article. In addition to the cogent arguments of the writer, we would merely hint to the lazy driver of a sulkey in the South, where the streams that cross the road afford the only opportunities of watering, the superlative pleasure of being released from the eternal tedium of getting down to unhook the rein.

"There is much mismanagement and consequent misery inflicted on horses through the force and continuance of custom, habit, and prejudice; particularly evinced by the use of the bearing-rein.

"The Editor is impelled by a wish to do good, prompted by attachment to the horse, and compassion for that much abused and most cruelly treated animal; influenced too, as he hopes, by a sincere desire to serve and benefit the owners. It is his object, by what he trusts will be found sound reasoning, to bring into disrepute, and (as soon as may be) into disuse, that tormenting part of the harness, the fixed bridle or bearing-rein.

"It is a principle in mechanics, that whenever agent or instrument suffers the least resistance from restraint, friction, or other wear or tear, it will do its office with the most care, with the greatest economy of time, and with the least expenditure of strength and money; and this whether the agent or instrument be an animal or a machine. Hence, to ensure the full exercise of an animal's power in the safest and most easy way to itself, we should be careful not permanently to disturb its natural posture. The question to be decided is, whether or not it is most judicious and proper to give a horse the free use of his head, or prevent him from having that use.

"It must be admitted that whenever a horse trips or stumbles, nature prompts him to try to save himself, and he instantly extends his neck and head for the purpose as a man would his arms: this natural effort increases the animal's danger if his head be at all confined by the bearing-rein, because the tug which he gives with his mouth is communicated to the harness upon his back to which the rein is hooked, and the effect is the same as if a man were with both his hands to lay hold of the collar of his coat to save himself. To render the bearing-rein or bridle of any utility in saving an animal from falling, it should be of great strength and substance, and fastened behind and above, or it will be useless.

"The dorsal muscles or sinews of the back in all quadrupeds run longitudinally or horizontally from the head and tail, and those extremities are main working powers—what the arms are to a walker or laborer, the head and tail are to the animal; tie a man's arms to his side, and even a gentle push or trip will throw him down. This is the effect produced by the bearing-rein. The horse's head being fixed, he is unable to use it as nature intended, and therefore if he trips or slides his head is of no use. When horses stumble, they often break the bearing-rein, and thus getting the head free are enabled to save themselves. We all know that when a horse is down, the first thing done is to 'give him his head' that he may get up. We do not mean to say that a horse will never stumble if worked without a bearing-rein, because we know that they sometimes fall whilst loose in the field; but we assert without fear of contradiction, that the surest way to keep a horse on his legs is at all times to give him free use of his head. The more he is crippled the more he needs his head. The bearing-rein may probably be of some use

in 'breaking* a colt,' and may, perhaps, help to 'get up his head' until he has been 'taught his paces,' but afterwards it can answer no end, except souring his temper, making him jib, deadening his mouth, wasting his strength, hurting his wind, injuring his sight, lessening his speed, abridging his services, shortening his days, throwing him down, and breaking his knees: all these, it is fearlessly asserted, proceed daily from the use of this cruel appendage.

"When running loose, the horse's neck is usually extended as straight as his back; in this manner horses would generally work. It is the natural position, and the nearer we approach to it the better for the animal, for he is then at ease; and (though little remembered) his pulmonary action, or breathing unimpeded. It is absurd to make a bend or an angle, (if at all acute or sharp) in a water-pipe, or hose; so it is absurd and cruel too to bend back out of its natural line the wind-pipe of the horse by the use of the bearing-rein. In the former case a full volume of water cannot be obtained; in the latter the free breathing of the animal (so essential to its comfort, and even to its life) is hindered.† *Denied* this may be; *disproved* it cannot. The effect of restraining a horse by the bearing-rein, is to prevent him from getting up to the collar. If the bit is in the least degree affected by the bearing-rein; in other words, if it is not entirely loose in the mouth, the horse is checked, and besides being kept from the full free exercise of his strength, he is prevented from leaning the weight of his body into the collar.

"We are aware that many who admit that bearing-reins are not safe, use them because *they like to see a horse look well, like to see him hold his head up, &c;* but a kind and humane man would not have such foolish desires; the care and comfort of his horse would be his only object. The mischievous effects before stated are often *overlooked* by many to whom the use of the bearing-rein is as natural as the saddle or any part of the harness. The Editor has often found very kind and respectable men, wholly ignorant of the pain and agony which their horses have endured.

"There is one infallible proof constantly to be obtained of the cruelty of the use of the bearing-rein, and of its injurious effects, though we believe very few persons are aware of it.—Whenever a horse has been worked with a tight bearing-rein, the corners of his mouth become *raw, inflame, fester, and eventually the mouth becomes enlarged on each side;* in some cases to the extent of *two inches*. Even before the bit has produced these visible effects, if the corner of the mouth, under the bit, be touched, the animal will flinch as if from hot iron. Let this be the sign with every master and servant.

"To what are these enlargements attributable; what causes them? Nothing but the friction of the bit in the efforts of the horse to get up to his work. How dreadful to see a horse heavily laden; his neck bent into a perfect curve; his mouth open; his eyes ready to start out of their sockets. The ignorant, though perhaps not cruelly disposed driver, looks on with admiration to see how 'handsome' his horse appears, and imagines that the tossing head, open mouth, and gnashing teeth are signs of game and strength, whilst on the contrary, they are the most unequivocal evidence of distress and agony. Let any one test the truth of this by loosing the bearing-rein, and he will immediately find the horse go faster, keep his mouth shut, and his head in one steady horizontal position.* A short time since the Editor stopped a wagon to look at the mouth of the shaft horse—he found the mouth actually cut open by the bit at least two inches on each side: the wagoner said 'he know'd it sure, *'twas the fair wear of the ir'n!*' The man was open to conviction, and upon the cause of this dreadful punishment being shown he altered the rein.

"The propensity to jib, if not actually caused, is much increased by the bearing-rein. In ascending a hill the freest horse may be compelled to stop and refuse to exert himself, knowing that he can put no more strength till the head is loose. A short time since, in Southampton-street, Covent Garden, the Editor of this pamphlet saw a crowd collected looking at a scavenger's cart, fully loaded, drawn by an immense horse. The street is a moderate ascent, and the horse had stopped just below the top of the hill: the driver turned the horse round down the hill, then up, and with his help-mate very humanely assisted by pushing. The horse, without being flogged or spoken to, went on steadily with his very heavy load to about the place he before stopped at, and again 'gave up:' he was sweating much, and appeared to be a game good horse. The Editor went up to the driver and advised him to unhook the bearing-rein; the man said, 'it's nau use, I have turned him around three times.' The Editor said, 'he must be a good horse to take to the load three times,' and

* It would be well if there were more colt benders—the tempers of horses are not studied by the generality of colt breakers; horses' tempers vary as much as men's.

† It is the opinion of many eminent veterinary surgeons, that "roaring and blindness are produced in carriage-horses and wagon-horses, by the bearing-reins."

* The dray horses in London exhibit the most painful examples of the cruelty of using a tight bearing-rein. Whether at work or standing they will be found in continual torment—tossing their heads, or resting the weight of them on the bit, and so drawing back the corners of their mouths, as nearly to outsplit the ligatures;—at work, instead of going on steadily, they "bob" their heads, feeling the check at every step they take.

pressed him to unhook the rein; the man replied, 'the ause 'ill fall down.' The Editor coaxed him to try; the rein was unhooked, and immediately the horse took the load from the spot where he stood: the man said, 'he never saud it done afore.' It is not uncommon for considerate drivers to unbear their horses at the foot of a hill, which is a very strong proof of the folly of using the rein at all. It has been and may again be advanced as a plea for its retention, that a horse after having been used to the rein will miss it, and so be liable to fall if he trips after it is taken off. A trial will prove that this is not the result.

"It is a common opinion that when a horse trips or stumbles, it is the rider or driver who pulls him up, by the sudden jerk or shortening of his reins, and prevents an actual fall; hence the moment a horse takes a false step, the rider or driver tugs the rein with all his might. We frequently hear it said, 'the horse was going to fall, but I pulled him up!—I kept him on his legs!' As well might a fly resting on a coach-wheel boast of its kicking up a dust; as well might a wagoner seated on the shafts, think to pull up a wagon which had lost its fore wheel. Such expressions are proofs of the ignorance of those who make them, because when they become aware of the fact that the horse has stumbled the danger is over—the animal has recovered itself, and their tug is useless. To help an animal effectually there must be 'where* to stand on,' and both an arm and a rein strong enough. A bearing-rein is fixed to the falling horse and falls with him—it cannot save him; it keeps a horse from seeing and avoiding stones and other impediments, it is a hindrance not a help; an injury, and not a benefit. If he fall with a bearing-rein he must break his knees or the rein, or its hook, or the crupper; if he trips without one, and the driver 'gives him his head,' by instantly slackening the reins (what few inexperienced Englishmen will either do, or believe to be judicious) the creature is set at liberty, and will probably quickly recover himself, unless receiving, as he is almost sure to do, many heavy lashes. It cannot be supposed that a horse stumbles willingly, therefore to punish him for it is unjust, and only adds to his fear.

"It must not, however, be inferred that all who use the bearing-rein approve of it. Servants, when men of humanity, experience, skill, and character, are often found to admit its folly and uselessness, but dare not lay it aside.

"It is said that the ladies powerfully obstruct the removal of this useless and injurious instrument. It is hoped that the few who drive and the many who keep their own horses, will give the best and strongest denial to this scandalous imputation, by immediately reprobating the use of the rein. Could their poor horses answer the questions—Why do you continually toss your heads when standing in harness? Why do you stretch open your mouths, shake your heads, and gnash your teeth? Why do you turn your heads back towards your sides, as if looking at the carriage? they would answer—all, all this is done to get relief from the agony that we are enduring by having our heads kept erect, and our necks bent by tight bridles.

"To ladies the Editor would appeal with earnestness. His heart has ached when passing the horses of the nobility and others at the doors of houses in London, to see the unceasing motion of the heads of the poor creatures, the coachmen sitting at their ease, perfectly unconcerned, and often doubtless unconscious of the agonizing pain of the muscles and sinews of the neck the horses are enduring. No humane person could knowingly suffer such cruelty to be practised. It is true that to the eyes of ignorant people, horses tortured with the bearing-rein look 'very fine,' but the true connoisseur will never be pleased at such distortions.

"England, where the best horses and the best drivers are to be found, England (it is said) is the only country in which that bane of the horse, the bearing-rein, is used! In France it is not used, and, as the natural consequence, horses in that country seldom fall to the ground; or so as to hurt themselves. At the very instant a horse stumbles the French coachman slackens the rein, that the horse may save himself.

"It is sincerely hoped that the entire removal of this punishing bridle will be speedily effected by the powerful aid of veterinary surgeons, by the owners and drivers of private carriages, noble and gentle, at once abolishing this useless, tormenting appendage; by the society for the prevention of cruelty to animals lending to this object their aid unitedly as a body, and individually as members; by giving circulation in newspapers and periodicals to the experience of the good effects of going without them; by the public patronizing those vehicles in which the servants do not use the bearing-rein; by humane travellers feeing well those coachmen who in this respect obey the dictates of humanity, sound policy, self-interest, and common sense. The Editor is aware that no good coachman would condescend to use bearing-reins, and persons much accustomed to travelling, if they see the horses come out with bearing-reins, immediately conclude the driver is one of the old school, or that he is not 'up to his work;' and they are generally right, for it will be found that he is not able to command his horses so well as the man who drives without them. The least reflection will show this must be so. If the horses have bearing-reins they lean their heads on them, and the coachman's reins may be seen loose and

* Archimedes said, "Give me a place to stand on and I will move the world."

dangling on the horse's back; if on the contrary, he drives without, he has the horses in hand always, and guides them as he pleases. This is more plainly the case with post-chaise drivers and hackney coachmen, whose reins are only used occasionally when they have bearing-bridles, instead of being always tight in their hands.

"The effect of bearing-reins upon coach-horses is shown at every stage when the horses are taken off. If they have bearing-reins they may be seen tossing their heads incessantly, although jaded, panting, and enveloped in steam: surely the poor creatures would not thus exert themselves in a state of great fatigue, if some greater distress were not affecting them. It is the agony of the sinews under the neck and throat, which being restrained so long, ache as if a man's arm were to be kept in a painful position. Horses which have done their stage without the bearing-reins, when taken off, stand with their heads down, breathing freely, and in comparative comfort. How often upon changing horses do we see the kind horse-keeper of a stupid bearing-rein coachman instantly unbear his horses and thus entitle himself from the humane traveller to the fee which the coachman had forfeited. At the time this paper is being published, the Editor has remarked that bearing-reins are more used in Bristol by coachmen and more cruelly tightened by carmen, than in any other place in the west of England; not only by carmen plying for hire, but by the drivers of the splendid dray-horses which are to be seen in that city."

SUBSTITUTE FOR GLUE AND CAULKING.

The remarkable properties of a new cement have lately been tried by the master ship-wrights at Woolwich, England, by advice of the lords of the admiralty. The experiments were highly interesting, and the results very important. Two pieces of African wood, called *teak*, very difficult to join by glue, on account of its oily nature, had a coating of the composition in a boiling state, applied, and shortly afterwards bolts and screws were attached to the end of each piece, and the power of a Bramah's hydraulic engine applied, to the extent of nineteen tons, when *the chain broke, without the slightest perceptible strain where the joining had been made.* A still larger chain, of one and a half inches, was then applied, which broke with a strain of twenty-one tons, also without effect upon the cement!

Four pieces of hard wood were then joined together, weighing collectively over four thousand four hundred pounds, and carried to the top of the shears in the dock yard, seventy-six feet high, and precipitated upon the hard granite wall below, without the joints yielding in the slightest manner!

A number of oak plank, eight inches thick and sixteen inches square, were then united with the cement, together, eight feet in height and eight feet in length, of the size of a first rate ship of war, without any thing else in the form of a bolt, or security of any kind, and it was set up as a target at the butt, in the masses, in the presence of the officers artillery, &c. Several shots were then made into the cemented planks, the effects of which were wonderful. *They tore the wood to pieces but had no effect upon the cement.* A hole six inches in diameter was then bored in the centre of the target, and a three and a half pound shell inserted and exploded by a slow match, which tore the wood into small splinters, *without in the least separating the composition.*

A valuable property of this composition, in addition to its wonderful tenacity, is said to be its capability of expansion in warm climates, like India rubber, and yet it will not become brittle under the coldest temperature. It is not surprising that it has become a great favorite with naval officers, as it is so clean as to resemble very much the French polish.

The value of the composition on board of vessels at sea may be illustrated by another experiment tried with it. Eight pieces of wood in the form of a mast, were joined together and a strain applied to another mast of an entire piece of wood, when *the latter first gave way!* Ship carpenters will, therefore, find no difficulty in effecting repairs at sea, with this extraordinary cement at hand. Nor is its value confined to the above or naval purposes, but it must become equally great for all purposes of the arts, where, the joining of parts is necessary, as it is *insoluble in water.* Its cost is only *about half that of common glue.* The great saving, too, by its universal adoption, and the important uses to which it may be applied, are incalculable. A Mr. Jeffrey is the inventor, and the composition consists of *shellac and India rubber, dissolved in naptha,* in certain proportions.

New York State Mechanic.

We think the above smells strongly of humbug.

NEWSPAPER LAW.

The law is, and so the courts decide, that the person to whom a paper is sent is responsible for the payment, if he receive the paper or make use of it, even though he never subscribed for it. His duty in such a case is not to take the paper from the office or place were it is left, but to notify the publisher that he does not wish for it. If papers are sent to a post office, store, tavern, or other place, and are not taken by the person to whom they are sent, the postmaster, store or tavern-keeper, &c. is responsible for the payment unless he immediately gives notice to

the publisher that they are not taken from the office or place where they are sent.

Extract from the Post Office Regulations, page 50, section 118:—"In every instance in which papers that come to your office are not taken out by the person to whom they are sent, you will give immediate notice of it to the publisher, adding the reasons, if known, why the papers are not taken out."

A bet against time was won by an Arabian horse at Bangalore, in the Presidency of Madras, running 400 miles in the space of four consecutive days. This occurred on the 27th July, 1841.

When the stopper of a glass decanter becomes too tight, a cloth wet with hot water and applied to the neck, will cause the glass to expand, so that the stopper may be easily removed.

OUR NEXT VOLUME.

With this number we complete the second volume of the Planter. The work enjoys what we have labored to procure for it, the reputation of being one of the most *practical* and *useful* periodicals published in the Union. In saying this, we arrogate nothing to ourselves, except the gift of prophecy, for we grounded the work upon the prediction that such would be the effect of drawing out the information of Southern farmers, and we boldly assert that our correspondents have fully verified the prediction. All that *we* have done, has been, to select, arrange, and sometimes, condense, the views of others. Such additions have been lately made to our lists, both of subscribers and correspondents, that we think we may venture to promise our readers that the third volume will not be less entertaining and instructive than the two that have preceded it. Additional arrangements have been made to give effect to the embellishments and mechanical execution of the work.

It is with no little pride and satisfaction that we look back upon the career that we have run. Starting without patrons, we relied upon our own exertions and the liberality of the agricultural public of the South for support. We were told that the work would be a failure, that there was no patriotism, no love of home in the South. It is a base slander, without the shadow of foundation. The Planter was most generously sustained, through times without a parallel, chiefly, at first, because it was a *Southern* paper, and there is not a people upon the face of the earth, that so fondly cling to their own institutions as those of this Southern country. Notwithstanding the hardness of the times, our list is now of the most satisfactory character; but this matter of dollars and cents, although a very good thing in its way, and, by the bye, very necessary to the support of a paper, is not all we have gained; what has been infinitely more grateful to us, is the meed of approbation bestowed upon our humble labors, and the kindly relations that have been engendered between us and thousands of our fellow-citizens, relations, that we humbly hope, will continue to exist, as long as they have *a dollar* in their pockets.

☞ That we may know what increase to make in our edition, we would be much obliged to such of our friends as intend to remain with us, to renew their subscriptions as soon as it may be convenient.

☞ The reprint of the January number has been delayed until we could ascertain what edition would be required. It will be mailed to those subscribers that have not received it, during the present month.

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